BULLET AND SHOT IN INDIAN FOREST PLAIN AND HILL

BULLET AND SHOT

Frontispiece.] [*See page* 165.

BULLET AND SHOT

IN

INDIAN FOREST, PLAIN AND HILL.

WITH HINTS TO BEGINNERS
IN INDIAN SHOOTING.

BY

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To

HIS UNSELFISH AND DEVOTED WIFE,

WHO, REGARDLESS OF HER OWN PREFERENCES,
HAS SHARED HER HUSBAND'S EXILE,
EVER LOYALLY SUPPORTING HIM AND CHEERFULLY BEARING
DISCOMFORTS AND INCONVENIENCES FOR HIS SAKE;
TO WHOM HE IS MOREOVER INDEBTED
FOR VALUABLE ASSISTANCE IN THE REVISION OF THIS WORK,
THE LATTER IS MOST LOVINGLY AND
GRATEFULLY INSCRIBED BY

THE AUTHOR.

PREFACE

THE Author hopes that, in spite of the many able works upon Indian Sport which have been written, a welcome may yet be accorded to the present effort to supply what he believes to be a want, viz., reliable and detailed information for the use of beginners in Indian Shooting. He also trusts that brother sportsmen and the general reading public may derive some pleasure from the perusal of his personal experiences.

The Author first went to India in the autumn of 1876, remained for five years in Assam and Sylhet, and then, having been offered an appointment in the forest department of the Mysore State, he accepted the same and entered upon his duties in Mysore upon the first day of the year 1882. From that date (with the exception, of course, of periods spent on leave at home) till 1896, when he left Mysore in order to practise at the Bar in Madura (S. India), he had constant opportunities, when on inspection duty in the forests, as well as on leave, of enjoying his favourite sport, and also

of conferring with other sportsmen (chiefly military officers) whose experience had in some cases been gained in other parts of India, the fauna of which the writer had never seen.

With a view to making this book as complete and generally useful as possible, the Author has not confined himself to the Game which he has personally shot, but, for the use of the beginner in Indian Shooting, a brief description of each of the principal game animals of that country not falling within the category of his own experience, has been compiled from other sources, his acknowledgments for assistance in this and other respects being due to the following Authors, whose valuable works have been studied and indented upon for various information contained in the present volume :

General A. A. A. Kinloch's *Large Game Shooting, Thibet and Northern India.*

Mr. R. A. Sterndale's *Natural History of Indian Mammalia.*

Dr. Jerdon's *The Mammals of India.*

Colonel R. Heber Percy, in the Badminton volume on Indian large game.

Colonel Ward's *The Sportsman's Guide to Cashmere and Ladak, etc.*

Mr. Rowland Ward's *Horn Measurements.*

PREFACE

Mr. A. O. Hume and Colonel Marshall's *The Game Birds of India.*

In writing the chapters upon "Rifles and Guns," etc., and that upon "Preparatory Taxidermy," the Author is indebted for valuable assistance to Mr. Henry Holland (Messrs. Holland and Holland, Ltd.) and Mr. G. Butt, of 49, Wigmore Street, respectively.

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BULLET AND SHOT

IN

INDIAN FOREST, PLAIN, AND HILL

CHAPTER I.

INTRODUCTION

SPORT, as distinguished from butchery, needs neither apology nor excuse; the former is the moderate and humane exercise of an inherent instinct worthy of a cultivated gentleman, the latter the revolting outcome of the undisciplined nature of the savage.

Amongst real sportsmen and the bravest soldiers will be found the most gentle and tender-hearted members of their sex, whilst the pursuit of large game in the spirit of true sport is an education in itself.

Field-Marshal Lord Roberts, V.C., etc., when, as Sir F. Roberts, he was Commander-in-Chief in Madras, gave a very practical indication of his opinion of the value of such training in the case of young officers, by encouraging the latter to go

out shooting whenever it was compatible with the exigencies of duty for them to do so.

Not only must the sportsman in pursuit of large game learn infinite patience during frequent periods of unrequited toil, but he must, in order to be really successful, often exercise much self-denial, more particularly when hill-shooting, or when working localities wherein the scarcity of means of transport circumscribes the amount of necessaries which can be taken with him. He must, moreover, be temperate in all things, if he is to attain the physical condition which alone will enable him to support severe exertion—often in great heat—under circumstances diametrically opposed to those of his usual life in his headquarters.

Then again, the sportsman who is in pursuit of dangerous game must learn to keep cool in moments of peril, and to strive to do always the right thing at the right moment, often with no time for deliberation.

As an incentive to exercise in climates which engender languor and a disinclination for exertion, the pursuit of both large and small game is invaluable; and the love of this form of sport, so common amongst our countrymen, is a potent factor in the preservation of the health of Europeans in India. It is not often that residents in the country, who are obliged to work for their living, have any opportunity of bagging more than a certain proportion of the long list of game animals inhabiting the vast continent of India, but there are at home many men with both leisure and ample means, who

may go out there to shoot large game, and to such are open the endless hunting-grounds between Little Thibet and Cape Comorin. The collections of trophies which may be made by such are limited only by the amount of time and labour which these fortunate ones of the earth may devote to this pursuit. Let me briefly sketch the distribution of the various species of large game which inhabit this enormous peninsula.

In the extreme south we find the elephant, tiger, panther, bison, sloth bear, hunting cheetah (rare), sambur, spotted deer, muntjac, Indian antelope, Indian gazelle, four-horned antelope, wolf, wild dog, wild boar, neelghaie, and the Neilgherry ibex, all of which, with the exception of the two last, are also to be found in Mysore.

Further north than Mysore we come to the Nizam's dominions, or the Deccan, which is one of the best tiger countries in India. Long before we reach these, however, the Neilgherry ibex, whose range is confined to the extreme south, has disappeared. Further north still, after the Nerbudda river has been crossed, the wild buffalo must be added to the list, and in Guzerat are to be found the very few specimens of the Indian lion still remaining in the empire. The Sunderbunds at the mouths of the Ganges afford shelter to the Javan rhinoceros, which also occurs in Burmah. The Salt range in the Punjab is the home of the Punjab wild sheep, or oorial; and Burmah contributes the tsine, and the thamine, as well as many of the animals already mentioned. On yet, and we come to the

great Bikanir Desert, the home of the finest black buck in India; while in the Nepaul Terai, Assam, and the Bhootan dooars, a further addition of the great Indian rhinoceros must be made. Once the Himalayas are reached, most of the southern game animals disappear, though a few of them are found at comparatively low elevations on those hills. In the sub-Himalayan tracts, in addition to most of the game animals of the south, the swamp deer and hog deer occur, as well as the buffalo and rhinoceros. On the Himalayas, an entirely new set of fauna is met with, comprising at various altitudes, the markhor, Himalayan ibex, serow, gooral, ovis ammon, burhel, shapoo, Cashmere and Sikkim stags, musk-deer, the red and black bears of the Himalayas, the snow leopard and the yak.

It will be observed from the above that the north of India offers a far greater variety of large game to the sportsman than does the south, for most of the game animals which inhabit the latter are found in some parts of the former also, while the north can boast in addition a large and exclusive game-list of its own.

The difference in the size of the trophies of the same species obtainable in various parts of India is very marked, as also the methods which must, according to local conditions, be employed in reducing the game into possession, some of the latter being far more enjoyable than are others.

Speaking very generally and comprehensively, the south, the Central Provinces, and hill ranges everywhere are the fields wherein shooting on

foot, *i.e.*, shooting without the employment of tame elephants, is practised. In Bengal, Assam, Nepaul, the Bhootan dooars, and Burmah, the sportsman who cannot command a number of elephants has but little chance of success.

The south appears on the whole to be more prolific in large elephant tusks and fine bison heads than is any other part of India, while, the forests admitting of shooting on foot, the game can be pursued under very pleasurable conditions.

In so vast a continent, the whole gamut of temperature is run through, from the fierce summer heat of the Deccan and the Punjab, the comparatively temperate climate of the Mysore plateau, the still cooler heights of the various hill ranges, up to the abode of eternal snow on the lofty Himalayas.

The best country for tiger shooting on foot is the Deccan, and the best season the hot weather—say from February 1st till the end of April. The most favourable season for the fine bison forests of Mysore is the early part of the south-west monsoon—say from June 15th to the middle of August. Oorial shooting on the Salt Range should be attempted only in November, December, and January, on account of the intense heat which prevails there. The best months for Cashmere are from April to the middle of June, after which the sportsman should move on to the comparatively small portion of Thibet which is open to him. From the middle of September to the end of December is the most favourable time in which

to try for the Cashmere stag, who then facilitates the sportsman's search for him by "calling."

It is a sad fact that all over India game is rapidly decreasing in numbers, and this is due entirely to the destruction wrought amongst them by natives, not for sport, but as a means of gain.

The sportsman's aim is to obtain the finest specimens which he can secure of each species, and he may, and often does, work hard for days together without firing his rifle. He in no appreciable way affects the numbers of the game, though, of course, in localities much frequented by his class, fine heads soon become scarce, the latter requiring time, and in many cases a long period thereof, to grow to first-class dimensions.

Day by day, and in every village, native poachers are at work, as if the sole aim and object of their existence were the extermination of every edible species. So loth is Government to interfere with what the poachers consider their vested rights, and so timid is it in risking opposition on the part of native agitators, that the inevitable day when legislation must at last interpose to save many beautiful, interesting, and harmless species from total extinction, is being put off and off with terribly sad effects. Locking the stable door after the horse has been stolen is admittedly a somewhat futile procedure, and it behoves the Indian Government to at once bestir itself, and, by a little highly necessary legislation, to stem the torrent which is fast sweeping away so many species of large game before it is too late.

INTRODUCTION

As will be seen from the Appendix, the Cashmere Government has at last been brought to see the necessity for game regulations, and it is to be hoped that the wild game of the Himalayas may be effectively protected against the usual wholesale butchery by natives during the winter months.

The Madras Government has, it will be observed, at last introduced game laws, which, however, apply only to the Neilgherry district, whereas it is quite time that effective protection should be afforded to game throughout the presidency, as well as in the independent, protected state of Mysore.

The author's personal experience of Indian sport has been derived from many years spent, for the most part, under very favourable circumstances for the pursuit of large game, chiefly in the south of India.

He can claim a somewhat intimate and extensive acquaintance with the game animals of the south, having bagged all of them with the single exception of the nilghaie. He has not shot the striped hyæna, though he has seen it in the jungle, nor does he include this scavenger amongst game animals.

As briefly indicated in the Preface, he has, with a view to rendering this work more complete, compiled from other authors brief notices of nearly all the game animals of India which have not fallen to his own rifle, and he hopes that these, together with the references which he has given to other books which deal comprehensively with them, may prove of service to the beginner who may wish to shoot large game in India.

For the native names in different Indian languages of the various species of game, as also in many cases for measurements, he is much indebted to the works of Mr. Sterndale and Dr. Jerdon, though he has occasionally seen fit to slightly modify their nomenclature.

During his long residence in the Mysore province as District Forest Officer, the author's advice and assistance in large game shooting was constantly invoked by other sportsmen (chiefly military officers), and he has had very clearly put before him the difficulty which beginners find in the prosecution of this sport before they have had time to learn for themselves by occasionally bitter, and often dearly-bought personal experience, how best to proceed.

With a view to smoothing the path of the tyro in the Indian jungles, the author has been careful to go into all details which have occurred to him as likely to aid in attaining that object, and he trusts that his efforts in this direction may prove successful.

Chapter XXIV. will be found a complete guide to the chief shooting grounds of the Mysore country, and as the language spoken therein (as also in Canara) is Canarese, a limited number of words likely to be useful to the sportsman have been furnished, with their Canarese equivalents spelt as phonetically as possible, without any regard to their spelling in the vernacular. The author has often supplied other sportsmen who did not know Canarese with a few of these words, which have,

he has been subsequently told, proved of service to them in the jungles.

For record heads, the author has consulted Mr. Rowland Ward's last edition, viz., *Horn Measurements.*

He is indebted for valuable assistance in writing Chapter XXVI. to Mr. Henry Holland (of Messrs. Holland and Holland, Limited), and in the case of Chapter XXVII. to Mr. G. Butt (late Edwin Ward), of 49, Wigmore Street.

He closes this introduction wishing his brother sportsmen the best of good fortune and health in the enjoyment of large and small game shooting in India.

CHAPTER II.

THE INDIAN BISON (*GAVÆUS GAURUS*)

THE Indian bison—*Gavæus Gaurus*—is a magnificent animal, which may well be described as emperor of all the bovinæ in the world. In point of size, his height, averaging in a big bull about six feet (or a few inches more) at the shoulder, is superior to that of any of the others, while he yields to none in activity, gameness, and symmetry of form.

The mature bull is black, with yellow-and-dirty-white-coloured stockings. The cows are dark-brown, while young animals vary in hue from reddish-brown to brown. The dorsal ridge, which rises between the shoulders and terminates over the loins, is a striking feature in the Indian bison. The horns of mature bulls vary in shape and size so much that it is not easy to describe them. Roughly speaking, however, they may be said to curve outwards, upwards, and inwards, and in the case of old specimens to be very much corrugated from the bases to a considerable portion of their length, while the tips are usually more or less worn down and blunted by use. In colour they are very dark at the bases, greenish or yellowish above, and black at and near the tips. The horns of young bulls curve outwards much less than do those of bulls of mature age, and they are quite smooth. In size, the horns of old bulls vary enormously.

Some exceedingly old heads which I have seen are quite small, with a very narrow sweep and a paltry girth measurement, while others are grand trophies. A bull with a sweep measurement of 33 inches, if the head is a fair one in other respects, is well worth shooting, and heads of 40 inches or above in sweep are uncommon. Only one of 40 inches has ever fallen to my share, and I give the measurements of this head in detail :—

Width across sweep	over 40 inches.
Girth round base of horn . . .	18 "
From tip to tip round outer edge and across forehead—in flesh . . .	78 "
ditto in bone	72 "
Between tips	nearly 28 "
Perpendicular distance between line drawn between tips and crest . .	11 "

My next best heads are two of $37\frac{1}{2}$ inches, and one of $35\frac{1}{2}$ inches respectively across sweep. These are all big measurements, yet I have known much larger heads bagged by other sportsmen, in each of three instances the bull being, I believe, the fortunate Nimrod's first bison.

A well-known Madras sportsman—Mr. Gordon Hadfield, of the Forest Department—has comparatively recently bagged a bull near Nelambur (South India), the measurements of whose head are :—

Width across sweep	44 inches.
Girth round base of horn . . .	$19\frac{1}{2}$ "
From tip to tip round outer edge and across forehead	83 "
Between tips	31 "
Perpendicular distance between line drawn between tips and crest . .	$13\frac{1}{2}$ "

This is undoubtedly the record head bagged by the present generation of sportsmen.

In Mysore Major L. (R.A.M.C.) bagged a bull with a sweep measurement of 42¼ inches, and horns measuring 21 inches in girth: and in Canara, Mr. St. Q. (of the 19th Hussars) bagged another head, which beats my biggest in all its measurements. In each of these last two instances, the bull was the first one ever shot by the fortunate sportsman.

About a month before writing this, I saw a magnificent head which had been bagged on the higher Travancore hills by Mr. W. M——, a planter there, the sweep measurement of which is either 42 or 41½ inches.

The proper method by which to obtain the accurate sweep measurement is to place the head flat on a table, the forehead downwards, and with a knife to make a scratch round the outside edge of each of the horns at the widest part, and then, after removal of the head, to measure the distance between the scratches.

A fine bull bison's head, well mounted, is a splendid trophy, and the pale blue eye of the animal is well imitated in the glass eyes made in America for the use of taxidermists. The operator, in mounting the head, should be careful to preserve the curve caused by the arched nasal bones in the original.

Bison are widely distributed throughout the large primeval forest tracts, and the secondary forest adjoining such, all over India, and they are to be found in hill ranges of great altitude, as well as in

flat forests at low elevations. Speaking generally, and with the reservation that Burmah has yielded some very fine heads, the further south one goes the finer bison heads become, though I have seen some very poor specimens which had been shot in the forests of South Canara, which also yields fine trophies.

Bison are impatient of disturbance by man, and many places in the hills, in which they used to be numerous, are now deserted by them owing to the opening up of tea, cinchona, and coffee estates. Bison are great travellers, and they wander over immense areas. When the grass in one part becomes too coarse to please them, they move to another locality in which it is later in springing. No hills appear too steep for them; on the contrary, they can gallop down so abrupt a declivity that anyone unacquainted with the powers of this most active animal would consider it negotiable by a beast of such a size only with due caution and at a slow pace. Comparatively recently, when in the Travancore hills, I came suddenly upon two bison while I was in the act of stalking an ibex, and upon getting our wind, the animals, without hesitation, crossed the steep ibex-hill, and gained the forest (from whence they had doubtless strayed in their search for tender grass) as if the formidable obstacle were not worthy of consideration. They could have reached the forest without much climbing by making a short détour, but they preferred the short cut—precipitous though it was.

Bison browse a good deal, and so vary their

ordinary diet of grass. They are very fond of the young, tender, sprouting bamboos, from one foot to three or four feet in height. They feed and lie down alternately both by day and by night, always selecting the longest grass which they can find in the vicinity for their siesta, which lasts from about ten a.m. till two or three o'clock p.m. if the sun be hot, but, if the weather be moist and cool, they often graze between those hours, and lie down when they feel so inclined on their grazing ground. Their necessity for chewing the cud renders it imperative for them to occasionally repose, if only for that purpose.

Bison are very fond of salt, and they are, in common with deer, elephants, and tame cattle, in the habit of resorting, generally by night or at early dawn, to any places where salt earth may be exposed in the vicinity of their grazing grounds for the time being.

Bison are gregarious, and are generally found in herds of from ten, fifteen, to twenty or more animals. Usually each herd contains only one *black* bull, the other males with it being immature beasts. Occasionally two black bulls are found at the same time with a herd, but in such cases one of them is probably a visitor or an interloper, whose stay with the herd, unless indeed he should be able to vanquish and drive off the bull in possession, will be but a very brief one. But it is a very common thing to find a herd without even one black bull accompanying it, for the mature males of many species of animals prefer solitude

at certain times; consequently it by no means follows, when a male bison is found alone, that he is a veritable "solitary bull." The real solitary bull is an aged animal who is no longer able to hold his own with younger and stronger rivals, and who is therefore compelled by stern necessity to lead a life apart from the females. Frequently two single bulls meet and keep together for some time at least, the absence of the other sex preventing any reason for disagreement between them. Owing mainly to the fact that comparatively few natives will eat bison meat, this noble animal is still very plentiful in suitable localities. If the majority, or even a considerable minority, of the meat-eating sections of the people of the country were not imbued with this prejudice, the natives would long ere this have done their best to exterminate the bison, as they are doing in the case of deer, antelope, etc., which the carnivorous castes shoot down, snare, and destroy, irrespective of sex or age.

Bison calves, if captured, are exceedingly difficult to rear, and they usually die while quite young. A few have, however, been brought up in captivity, notably one belonging to Major R. (of the Royal Scots), who shipped it home at the age of two years as a present to Her Majesty the Queen Empress. This young bull most unfortunately died at Aden while on the voyage. So far as I am aware, but one specimen of the Indian bison has reached England alive, and that was a member of a herd captured by a Rajah in the Straits, who

succeeded in driving a herd of the animals into a stockade. It subsequently died in the Regents' Park Zoological Gardens.

Mr. M., a planter on the Travancore hills, conceived and actually carried out to completion the brilliant idea of capturing a full-grown bull bison in a pitfall, and then of surrounding the latter with a roomy and strong stockade, and of letting the bull loose within this enclosure. The success of his achievement was complete, and the bull soon became so tame that he would allow Mr. M. to handle him freely, though he would not permit a native to go near him. At last, to Mr. M.'s great disappointment, the bull succeeded one night in displacing the bars of the gate of the stockade, disappeared, and was never seen again.

The only bison calf which I have ever possessed died almost immediately after I received it, since it had been nearly starved for some days in a native village before it was brought to me, its captors being very ignorant and careless. I have seen a very young calf left behind, crouching like a hare in its form, after I had fired at and had killed a member of the herd, the rest of which, with the exception of the little calf, had rushed away at the shot. The tiny animal was, however, far too active to allow itself to be caught, and easily made good its escape.

Bison in southern India are exceedingly timid, inoffensive creatures, and it is only when one has been wounded and is being followed up, that the sportsman may possibly be charged. Even in such

event, the bison usually contents himself with one rush and then goes on, though he *may* charge again and again if further followed up, but far more frequently he does not charge at all. The usual reason for a bison charging is that the animal, very probably struck through the lungs, or with a leg broken, betakes itself to the densest cover which it can find, and, when it feels itself unable to travel further, turns round and stands motionless, watching for its enemies. The sportsman and his gun-bearers following the blood trail are apparent to the bison's keen sense of hearing, and if the wind be from them to him, they are also obvious to his very acute sense of smell; while, since the animal is standing silently in thick cover, they can neither hear nor see *him*, till, with a premonitory snort, and "like an express train," he is upon, or past them.

Usually he goes on, either having upset one or more of the party, or having missed them, as the case may be, but there have been instances in which a bull bison has stuck to his man with great pertinacity. One of these occurred in my own district to Mr. (now Colonel) N. C., who was at the time a member of Sir F. (now Lord) Roberts' staff. Mr. N. C., having read in Sanderson's book that one should always rapidly pursue bison immediately after firing at them—on account of a habit which they have when suddenly alarmed, or being fired at, of pulling up and facing round after they have run a short distance—ran forward after firing at a bull, trying as he went to reload his 8-bore which had rather a stiff action. He had only just reached

the spot where the bull was standing at the shot, when, from behind a clump of bamboos, the bull came at him at speed. C. interposed a tree between himself and the bull, who cut a piece out of the bark with his horn as he rushed by, and then turned round and went at him again with the same result. C. then thought that he would try to reach a more distant tree, and ran to do so, but, being tripped up by a fallen branch, log, or bamboo hidden in the grass, he fell prone, upon which the bull came and did all that he could to horn him, but succeeded only in ripping his garments considerably, and at last, getting his horn round C., tossed him, and then came and stood over him again. C., a strong, athletic man, now did what was very unwise, viz., he sat up and hit the bison with his fists in the eyes, and kicked him on the nose, until, for some unexplained reason, the bull left him and went off. That the bull was but very slightly wounded was evident from the fact that, though C. followed him up for some miles, he never saw him again. C.'s knuckles were described to me, by a man who saw him soon after the adventure, as being terribly skinned, and he afterwards showed me a thick, plain gold ring, which he was wearing at the time, battered out of all shape. Now this bison did not act at all in the way in which one would expect an animal of his kind to behave. In the first place, although not severely wounded, he remained where he was standing when first fired at; and in the second, he displayed great pertinacity; while the third, and

perhaps most extraordinary proceeding upon his part, was his leaving C. (although he was in such a vindictive temper) while that officer was pommelling him—for I cannot believe that C.'s efforts could have really inconvenienced him.

One of my favourite jungle-men—a little Kurraba—was an eye-witness of the encounter, since he was jumping about behind a bamboo clump, bewailing C.'s fate, but never thinking of firing off the spare rifle which he carried! This little Kurraba's idea was that the bull left C. because the latter beat him so severely, but I find it impossible to imagine that so huge a beast could be hurt by kicks and by blows from a man's feet and fists.

Quite recently Mr. R. M., a planter on the Billiga-Rungun hills in Mysore, had the narrowest possible escape, being so fearfully injured by a bison that his recovery was little short of miraculous. Mr. M. had been out shooting, and had bagged a bull. He was walking back, accompanied by one native, when all of a sudden a bison rushed at him from behind and horned him through the back, the horn making a huge wound, and penetrating the lung. But for the kindness of one of the Army Medical Staff in Bangalore, who went and stayed with him, and the unremitting care of his charming and plucky wife, Mr. M. could not have recovered, and in fact, with every advantage in their favour, very few men could have survived such a wound. It is quite unknown what induced the bison to attack Mr. M.; whether the animal was one which

had been wounded by a brother sportsman, or a cow with a very young calf very close to whom Mr. M. unawares passed, will never be ascertained. So sudden and so effectual was the attack, that even the sex of the assailant is unknown.

Many years ago a sportsman was killed in the Pulney hills by a wounded bull. In this case death ensued very quickly after the wound was inflicted, the horn having penetrated the stomach.

In 1897 a Colonel Syers was killed by a bison in the Malay Peninsula.

It is quite extraordinary how very few people have been hurt by bison, as compared with the great number who have been upset, or even tossed by them. I have known many men who have been knocked over by bison, several of them while shooting in my own district, but not one, with the single exception of Mr. M., was at all seriously injured.

The big bull mentioned above as having been bagged by Mr. St. Q., tossed that sportsman on to his back, and Mr. St. Q. fell off behind as the bull rushed on, having got rid of his very temporary jockey! Captain H., of the Bedfordshire Regiment, was shooting in my district, and fired at a bull bison. He followed the blood trail, and was charged furiously from the front by a *cow.* He fired at and dropped her, but the impetus of her rush carried her on, and she upset H., who fell with his leg under the expiring beast, and was unable to extricate it till the latter died. He then found a second blood trail, and following it up, came upon a bull standing, in a helpless state, with

its throat cut by the bullet. H.'s ball had first cut the throat of the bull, and had then gone on into the cow beyond. As may well be imagined, his leg was very badly bruised. Curiously enough, his companion in this trip—Captain F., of the same regiment—was also upset by a wounded bull, who knocked him (a big, powerful man) clean over, although missing his aim, by a creeper, which he took with him in his rush, and which cut through F.'s gaiter and stocking, and the skin of his leg. The bull then went on and lay down, and F. followed him up alone and killed him.

I have known several different sounds emitted by bison. The one most frequently heard is their snort of alarm when suddenly disturbed; I have also heard them give vent to a low "moo," very like that of domestic cattle. In the Versinaad valley, in the Madura district, I heard bison making a noise which I mistook for one made by elephants; and I once heard a bison, which had been struck in the neck by a ·500 Express (solid) bullet and was floundering forward on its knees, bellow plaintively. This last animal recovered itself without falling right over, and went off and I did not see it again.

Bison are forest-loving animals, and on the hill ranges inhabited by them, where open grassy slopes and dense cover alternate, the hot hours of the day are spent in the latter, and they must be stalked and shot, like other hill game, when they are out on the grass in the mornings and afternoons.

The tail of a bison makes excellent soup, the tongue is a delicacy, the marrow-bones afford first-rate material for marrow-toast, and the under-cut, though somewhat rich, is well-flavoured and tender.

Although as a rule a bison has no dewlap, the first bull which I ever bagged had a well-defined one. Captain (now Colonel) W. (late of the 43rd O. L. I.), who was with me, and who had shot a very large number of bison, was greatly struck by the dewlap carried by this animal—a solitary bull with a very fair head—and he called my attention to it.

When close to bison, a strong smell as of the domestic cow is often very apparent, but this is not an unfailing guide to the proximity of the animals, as it remains in a place where the bison have been lying down for some time after they have moved off.

It is very curious how the natives inhabiting the Cossya hills in Assam fear bison. The late Major Cock—a great Assam sportsman, who was killed at the assault of Khonoma, in the Naga hills, some twenty years ago—stated that he had seen natives who had little fear of elephants or tigers, show signs of funk when called upon to follow bison. Possibly, just as the lion evinces a very different disposition in Eastern Africa from that characterising the same animal when encountered in the south and in Somaliland—as is noticed in one of the Badminton Library volumes on big-game shooting, by Mr. F. J. Jackson—the bison of Assam may be more prone to attack without

provocation than are his congeners in the south of India.

Special localities for bison are numberless, and I can note only a few.

For fine heads, Mysore and Travancore, the Anaimalai hills and the Western Ghants are to be recommended, but, as elsewhere stated, I have seen a number of very poor, though mature heads, which have been shot in Canara just below the Western Ghants—a district which yields very fine heads also.

The best districts in the province of Mysore for bison are those of Mysore, Kadur, and Shimoga. The railway runs as far as the town of Mysore (and further in one direction), and an easy journey thence by bullock-coach will take the sportsman to bison ground.

From Bangalore, the bison grounds of the Kadur and Shimoga districts can be approached by rail (the railway extension from Birur to Shimoga, lately under construction, must be completed by this time), a short journey across country from the nearest railway station sufficing to place the sportsman upon the ground which he may intend to work. Travelling across country in Mysore is easy, since there are travellers' bungalows at convenient intervals along all the main roads, and also because a letter addressed to the Amildar of any Taluq (division of a district) giving timely notice, will ensure relays of bullocks being posted at all stages along the road by which the sportsman may elect to travel. Using posted bullocks, an

average rate of speed of four miles an hour by day, and three miles an hour by night (including halts for changing bullocks, and the delays and obstructions so dear to the native of India), may be counted upon.

Bullock-coach travelling is a lazy but comfortable means of progression, and, the conveyance itself being commodious, a good many necessaries can accompany the sportsman in his own carriage. His carts, which will travel at a rate *while marching* of only two miles per hour, will of course have preceded him. Bullock-coaches can be hired from Framjee, in Mysore, who also supplies soda-water and general stores, though I should recommend a visitor to purchase his tinned provisions and liquor in Bangalore. It is probable that, with the completion of the railway extension from Birur to Shimoga, coaches available for hire by the sportsman will be located at the principal stations.

Other good localities in southern India are parts of the Coimbatore district, the Wynaad, and the Travancore hills.

The late Captain Forsyth in his charming book *The Highlands of Central India*, General A. A. A. Kinloch in his *Large Game Shooting in Thibet and Northern India*, and Mr. Sterndale in *Seonee*, have dealt with bison-shooting in the Central Provinces, and on the Satpura range in that part of India.

Bison are to be found in Assam and Burmah, and in fact in all sub-Himalayan tracts of forest of sufficient continuity.

The vernacular names for the bison are—

Hindustani—Gaor or Gaori-gai, Bun-boda.

In Seonee and Mandla districts—Bunparra, Boda.

By Southern Gouds—Pera-maoo.

Mahrathi—Gaoiya.

Canarese (the language chiefly spoken in Mysore)—Kartee, Kard-yemmay, Kard-kworna, (bull = kworna; cow = yemmay.)

Tamil—Kaluzeṇi.

By Mussalmen in Southern India—Jungli-Kulgha.

In Burmah—Pyoung.

CHAPTER III.

BISON SHOOTING

THERE are few forms of sport, with the grooved or smooth barrel, more exciting, and from every point of view more enjoyable, than the pursuit of this grand specimen of the genus Bos. Whether the forests of the low country, or one of the hill ranges be the scene of action, the sport is one which pre-eminently demands all the pursuer's powers of endurance, and all his knowledge of the habits of the game; and, large though the animal be, and consequently easy to hit, hitting a bison in the wrong place is only useless cruelty, since the poor beast so often escapes—at the best to suffer great pain for a considerable time, and too often to die a lingering death in solitude.

In the low-country forests the *modus operandi* is as follows. An early start is made, and the sportsman, taking with him men enough to carry his luncheon, drinkables for the day, and his battery, usually proceeds towards any well-known *salt-licks* (or places in which salt earth is exposed) in the hope of finding fresh tracks made during the previous night or at early dawn. Possibly he may come upon such tracks, as he traverses alternately

bamboo jungle, open tree forest, and dense thickets, while on his way to the lick, or he may find none until he has reached the latter—situated probably either in an open glade on flat ground, or in the bank of a deep nullah. The salt-lick will be found ploughed up by the tracks of bison, elephant, sambur, and spotted deer; and possibly the huge pugs of a tiger close by, made as he lay in ambush, will show how well aware the tyrant of the forest is of the habits of the animals upon which he preys.

These resorts are well known to the jungle men who act as the sportsman's guides, and usually, if bison are anywhere in the vicinity, they visit a lick nightly during wet weather, in order to eat some of the salt earth.

It sometimes happens that there are several such licks only two or three miles apart, and it may be necessary to visit more than one of them before fresh tracks are found. It is generally worth while to follow a track made any time during the previous night, provided only that it be found fairly early in the day—say before 11 a.m.—and the jungle men are very expert in estimating the time which has elapsed since a track was made. This is a very much more difficult matter than might be supposed, and even the best trackers are occasionally at fault.

I remember a very striking instance of this. I was in camp in a forest lodge called Rampore (in the Ainurmarigudi forest in Mysore), situated close to the bank of the Noogoo river. It was in the south-west monsoon, and the weather was very wet. We left camp early one morning, and

within about a mile came upon quite fresh tracks. After following these for some time, we came up with the bison, which were lying down in long grass, and disturbed them without getting a shot. I followed up this herd for the best part of the day (which was cold and dark, but without much rain) without getting a chance at the bull, and then gave up the pursuit and started back to camp. On the way, when at no great distance from the lodge, we came upon tracks which the men considered so very fresh that, late as it was, we followed them, thinking that we had found the tracks of another herd which had passed only just before we had come across their footprints. The tracks led to a salt-lick, and thence on through the forest, till we arrived at last at the spot at which we had found them in the early morning! We had, *in the evening*, been following tracks of the same herd made *before* the tracks which we had found in the early morning! So cool and damp was it, that blades of grass, cut by the hoofs of the bison, remained perfectly fresh and unwithered during the whole day! If there be any sun, the blades of grass so cut wither very quickly, and the tracks made by the same animal vary in appearance very greatly according to whether they are exposed to the sun or are in the shade.

Spiders often spin their webs in the deep tracks made by bison in soft ground; and in my experience an otherwise fresh-looking track, in which a spider's web is found, had better be abandoned rather than followed.

The worst feature of tracking is that the sports-

man is entirely at the mercy of the wind. Where the tracks go, he must follow, whether up or down wind; and sometimes for several days together he will experience the disappointment of hearing the bison dash off, having got his wind, without obtaining a chance at them. This is a risk which *must* be run, and against which no skill or knowledge of woodcraft can protect anyone, and it is a very severe handicap.

It is essential in bison shooting (and, in fact, in all big-game shooting in the forest) that the sportsman's movements should be as noiseless as possible, and, of course, he should never utter anything louder than a low whisper.

His boots should be made *without heels*, and when he knows that the game is near, he should advance pointing his toes downwards as much as possible.

In the flat forests of part of the Mysore district, I often took a Pegu pony out shooting with me, and unless we had to cross any obstacles over which it would have been risky to take him, he frequently followed me throughout the day. My plan was to ride until we found tracks, when I dismounted. Two Kurraba trackers, each carrying a rifle or gun, and sometimes a third unencumbered by anything, preceded me by two or three paces; at some distance behind me came two more with my luncheon bag and drinkables; and a long way behind the latter again, came a third pair (or a single one), with the syce (groom) leading the pony.

The best time for bison shooting in the forests of Mysore is during the south-west monsoon, which

usually bursts in the first half of the month of June and continues until the autumn, when the wind veers round to the north-east, and the north-east monsoon replaces the former.

For choice, I consider the beginning of the south-west monsoon as *the* ideal time for bison shooting in Mysore. The grass then is (provided fire protection has been unsuccessful) short and of a very vivid emerald hue. The ground being soft, tracking is easy, while frequent rains usually render it practicable to judge correctly the length of time which has elapsed since any track which may be found was made. A further advantage is that, although there is at any time of the year no heat worthy of the name to complain of in Mysore, at this particular season cloudy skies and cold wet days often lighten the labour of a long day's toil after bison. At this time, which corresponds to the early summer at home, forest nature looks her best, and each well-grown tree is an object of beauty to the lover of forest life and scenery.

The sportsman who is intent on bison shooting should rise before dawn, and make as good a meal as he can manage to cope with at so early an hour before going out. He should take with him food enough for the day, remembering that it may be late ere he can return to camp. He must also carry sufficient fluid to last him till his return—cold tea or soda-water, as he may prefer, since he must not drink a drop of jungle water unless it has been boiled, and thus rendered innocuous.

Native servants cannot be trusted to boil water for drinking purposes, unless the sportsman should personally see it done, and few will take this trouble.

I have shot bison with a 4-bore, an 8-bore, a ·577 express, and a ·500 express. On the whole, for work upon this game in fairly open forests and in hilly country, I consider a powerful ·577, with a charge of 6½ drachms of powder, as *the* best weapon for the sport, the bullets used being either solid, or with only a very small, short hollow filled by a wooden plug.

Its accuracy and handiness are great advantages in favour of the ·577, and my experience of the weapon is that a bull hit fairly accurately with it is as good as bagged, though he may, and probably will, unless shot through the heart, require some more shooting before he is laid low.

In very dense cover however, in which following up a wounded bison is dangerous work, I should prefer the 4-bore, as it has great knocking-down power, and a bison hit at all accurately with it either drops at once, or stands helpless.

An 8-bore is also a capital weapon for bison shooting, and I have shot many with this bore, though I have also hit and lost a good number with it.

The ·500 is not to be recommended for use upon bison, though they can be killed with it if solid bullets be used, and it is certainly useful for braining a bull at the end of a hunt.

The number of bullets occasionally found in an

old bull bison bears startling testimony to the ability of the animal to support badly-placed lead, and I have seen the head of one, which was shot by the late Sir James Gordon, K.C.S.I. (and which was killed by him with a single 16 or 18-bore bullet), in whose carcass, the Kurrabas, on cutting it up, found no less than thirteen bullets! I have seen bullets lying under the skin of newly killed bison, the presence of each being evidenced by a round protuberance, a cut through the skin from the hunting knife at once exposing the bullet.

When a bison is shot in any forest in Mysore in which there are Kurrabas, these little nomads remove the whole of the flesh, cutting it into strips, which they then expose to the sun—on a rock if there should be one handy for the purpose—and so dry the meat for future consumption. The sportsman can feel, therefore, that he is not killing a large animal to waste. One caution, however, I must give him, viz., not to put his foot upon a slain bull, for, should he do so, owing to some superstition of their own, the Kurrabas will not eat its flesh.

Personally, I hate following herd bison if there are any single bulls about, for, let the sportsman be as careful and as experienced as possible, the fact that there are cows with the herd makes it incumbent upon him never to fire unless he is sure that the animal is a big bull. Now it follows that since in a herd of say ten, fifteen, or twenty bison, there is usually but one bull fit to shoot, the chances are nine, fourteen, or nineteen to one

respectively against the animal first seen—if the bison are come upon suddenly in cover—being the only one which he desires to kill.

In spite of all precautions, some cows are so dark in colour, and carry such big heads, that a mistake *may* occur, and even the best sportsman may incur the shame and self-reproach of having accidentally shot a cow.

In order to be sure that a bison in a herd is a bull, the sportsman must either see the animals' heads from the front—as may occur if he comes upon them in thick cover, hears a snort, and sees big heads with outstretched noses pointed in his direction—or he must see the herd in the open, and be able to form some comparison. A full-grown cow bison looks a very big beast, and if an unusually dark specimen should be come upon when her head is hidden (and no other bison visible), when the sportsman is following the tracks of a single bull, the latter would shoot her without hesitation in the belief that she was the object of his pursuit.

It is sickening to a sportsman to shoot a cow by accident, and the danger of so doing inclined me latterly to practically confine myself to single bulls.

Very fine heads have occasionally been shot in herds, but the herd bull is generally an animal in the very prime of life, whose horns, however, bear no comparison in size to those of a veritable solitary bull.

In following a single bull, the sportsman has no

chance of hitting a cow by mistake, unless he should happen to see one member only of a herd of the proximity of which he had no previous idea. This occurs so very rarely that this single risk he must run if shooting in a thick, low-country forest; for so acute are the senses of the animal, that he cannot delay firing should he come upon and see any vital portion or large limb of it—probably through intervening jungle, and usually at pretty close quarters. Should he delay till he could make out the animal properly, it would most likely detect him and vanish without giving him another chance.

If the sportsman should obtain a shot at a bull standing broadside on, a bullet placed just behind the shoulder, and a little below the centre of the side, will be fatal. If he should fire more in front, and break the shoulder-blade, the animal will shortly be at his mercy; though he may travel a little way if the bone has only been perforated, until it breaks under the weight of the huge body. A shot fired at right angles with the body far back through the ribs is useless, and beyond inflicting a cruel wound, which may cause the subsequent lingering death of the animal, will have no effect in compassing the object of the sportsman, viz., the bagging of his trophy.

A shot high up through the loins, thus perforating the liver, is a certain one, but is not so rapid in effect as a bullet well placed behind the shoulder. The animal in the former case may travel, fight, and take some more lead ere he dies, if followed up

at once. For this shot, the spot to be aimed at is about nine inches below the termination of the dorsal ridge.

If no better shot can be obtained—as for instance when the animal is standing broadside-on, with all its body, with the exception of one hind-quarter, hidden by cover—the best plan is not to delay in the hope that it will afford a better chance, but to at once break the hip-joint, which done, the bull cannot escape.

Should the animal be standing facing the sportsman, a shot in the centre of the chest is fatal, and is quite as rapid in effect as is one behind the shoulder. If, on the contrary, the bull be standing or moving away, with only his hind-quarters visible, the best shot is straight under the root of the tail. A bullet fired thus from a powerful weapon will rake the whole body and penetrate the vitals. Even should the aim be hardly true, one or other of the hip-joints or hind-legs will probably be broken. A bison with a broken leg cannot travel far, and will be soon recovered on following up. A shot fired diagonally behind the ribs in a line to the opposite shoulder is a deadly one.

If only the head of the animal be visible—poked up and staring at the sportsman with the nose well elevated—a shot in the cartilage of the nose, plumb centre, and slightly above a line drawn between the nostrils, will penetrate the brain and drop the bull dead on the spot.

For finishing off a floored bull (which common humanity requires should be done at the earliest

possible moment) I use a ·500 express, a solid bullet from which, fired at the proper angle through the forehead between the eyes, behind the ear, or behind the horns, brains and kills him instantaneously.

In following a wounded bull, the one thing to avoid, if possible, is the coming upon him so suddenly, that, should the animal charge, the sportsman would have no time to use his rifle.

A bison charges at very high speed, and, unless he can be seen at some little distance, has the game all in his own hands so far as the sportsman's ability to defend himself is concerned.

Considering that a wounded bison traverses the densest cover which it can find, and that its pursuers cannot possibly tell whether it is not travelling rapidly with the intention of holding on for a long distance; or whether, on the other hand, it is not hidden in some thicket close by, ready to rush down upon them with lowered horns the moment they shall have approached within a few yards, caution in following up a wounded beast is highly advisable.

If the forest be fairly open, so that the sportsman can see an animal at a distance of, say, twenty-five yards, he can, and should, press on without loss of time; but when the tracks lead through places—such as thickets of young bamboo or long grass—in which even so large an animal as a bison would be invisible at a few yards' distance, great circumspection is necessary, and the best plan is for the sportsman to keep causing his men to climb

any trees met with on the track as he advances—of course in front of his men, for, as soon as there is any chance of danger, the armed man's position should be the van, and that of the unarmed men the rear.

It may be that the portion of the forest in which the bull was wounded is open in the main, but with an occasional thicket interposing here and there. In such a case the track should be followed at a good pace in the open portions, two trackers (not encumbered by guns) being in advance, and as soon as the tracks enter a thicket, the sportsman should take the lead, rifle on full cock in hand, and further progress be noiseless and cautious.

If the thicket be one which is of small extent, the shortest way is to "ring" it by going round the outside and seeing whether the tracks lead out of it again on the other side. If they do not, it is obvious that the bull has pulled up in it, and in such a case, if approached judiciously, he may be slain; but if blundered in upon, will very probably knock over or toss one of his pursuers, and will once more retreat, when the following up process will have to be repeated.

Considering that a wounded bull bison will sometimes travel for miles, and often escape after all, it is obvious that every minute spent in unnecessary precautions is to be deplored.

There are very few rules without exceptions, and I have come across one of the latter in the case of a bullet through the lungs, which is ordinarily fatal. I wounded a bull one day and it went off,

the light-coloured frothy blood on the track bearing indisputable evidence that it had been hit through the lungs. I followed it as long as there was light to do so and yet to reach camp before nightfall, and came up with it several times at long intervals, but did not obtain another shot. Next morning early, I took up the tracks at the spot at which I had left them on the previous evening, quite expecting to find the bull lying dead, but after following them for a long way, I found that he had grazed heavily during the night, or early that morning, and when at last I came up to where he had been reposing, his open hoof-marks, going off with long strides from the form which he had made in lying down, showed that he had got our wind and had gone off quite fresh. All bleeding had stopped, and I hope, and believe, that that bull quite recovered from its wound.

Bison often take many bullets after having been wounded for the first time. It seems as if, when an animal has received a fairly severe, and yet not rapidly mortal wound, he can, in certain cases, support several other shocks, any one of which would be sufficient to place *hors de combat* an unwounded beast. I hope, and believe, that the reason for this is that after one very severe nervous shock, sensation is deadened, and so the poor beasts suffer far less pain than they would otherwise experience when subsequent wounds are inflicted upon them. I cannot pathologically explain this fact, but presume that the nervous system is responsible for it.

As indicated above, body shots in the case of bison must be well placed, otherwise the animals are likely to escape; but if a limb-bone be broken, the animal cannot go very far, though he may travel for some little distance before he pulls up.

Having bagged his bull, the sportsman's next care should be to preserve its trophies. Of these the head is, of course, the chief. If this be a fine specimen, it is well worth while to forward it for preservation to a taxidermist, but, as the bull may be shot at a distance of a week's or ten days' journey from the nearest member of this profession, much labour must be spent upon the "mask," or it will go bad and become quite useless.

In the monsoon in Mysore, it is an exceedingly difficult matter to preserve a bison's mask. Personally, I succeeded in saving but one head-skin of a bull shot at that time, and in this case it was owing entirely to my having bagged it at a distance of only some forty miles across country from the large town of Mysore, that I was able to save the head-skin. I effected this in the following manner. I had taken out men enough to carry in the head of a bull in case I should bag one (four men are required solely for this purpose), and the head was brought straight into camp directly after the bull had been shot. I kept men at work skinning it from about seven o'clock (when it reached camp) till midnight, supervising the operation myself to prevent any punctures being made in the skin round the eyes, nose, crest,

and mouth; and I had two men kept ready to carry the mask, wound round a bamboo, through the night to Mysore, promising them a handsome reward if they should reach that town by a certain time. The head-skin thus reached the native worker in leather (chuckler), to whom it was consigned, in good order, and he put it into pickle at once; and after it had been thoroughly cured, I sent it, with the skull and horns, to a taxidermist on the Nilgiri hills, and a magnificent trophy (which is now at home) was the result.

In dry weather, when there is plenty of sun, drying a bison's mask is an easy operation. Plentiful applications of arsenical soap and turpentine to the ears and mouth, and a good painting with these preservatives all over the hairy side, (the drugs being rubbed well into the skin), together with quantities of wood ashes in the first instance, and afterwards of arsenical soap followed by more wood ashes to the raw side, will, with full exposure to the Mysore sun, preserve the mask so that the hair will not slip before the very thick skin has had time to dry sufficiently to arrest all decay. In hotter climates than Mysore, exposure to the sun should be avoided. No doubt if the sportsman went out in the monsoon equipped with a barrel, the materials for making brine, and the necessary tools for coopering the former so as to exclude air, he might preserve his masks in the monsoon in the manner recommended by Mr. Rowland Ward, but it is seldom that he goes out so prepared, and unless he were

invariably to do so, he might not get a head worth mounting when he had his barrel with him, for such heads are not to be picked up every day.

If it be the sportsman's intention to preserve the head for mounting, the latter must be cut off so as to leave a very long neck. The proper way is for him, with his hunting knife, to *personally* make incisions through the epidermis where he wishes the skin to be cut, and then for his men to sever the thick skin along the lines so marked for them.

After this, the neck should be skinned right up to the head, and the carcass heaved over (six men can, after some labour, effect this), and the other side similarly dealt with. Having skinned the neck thus, the muscles should be cut through down to the spine at the junction of the atlas and the axis, after which the head can be severed from the body by means of an axe or a heavy chopper.

If, on the other hand, it is not required to preserve the mask for subsequent mounting, the head can be cut off short with only the skin covering itself, and the best plan in such event is to skin the head, and then to bury it up to the base of the horns in the mud of a forest pond or swamp, and so to allow the flesh to rot, after which the latter can be removed without difficulty. The brains should be scooped out with a rude spoon made of bamboo, and a solution of carbolic acid poured into the brain-pan will reduce the unpleasant smell.

Time, and constant exposure to the sun, will effect all that is thereafter required, with the exception of the measures necessary for the preservation of the horns, the bony cores of which soon become full of maggots. To prevent damage to the horns, the latter should be worked about by hand (after all the previous processes have been completed) until they have become loose, and then removed from the cores, and these, as well as the inside of the horns, should be well washed with a solution of carbolic acid.

In a country in which the processes of decay are so rapid as they are in India, it behoves the sportsman to neglect no precaution which may enable him to successfully preserve a fine trophy.

The only other trophies yielded by the bison are the hoofs. These are easily detached from the feet, and require no special treatment. Out of these pin-cushions, inkstands, etc., can be made.

CHAPTER IV.

REMINISCENCES OF BISON SHOOTING

MY FIRST BISON

IT seems a long time ago, that memorable day, on which, for the first time in my life, I beheld the mighty gaur in the flesh ; still, though it is now many years since the occurrences which I am about to relate happened, every incident and each scene are as fresh and clear-cut in my mind's eye as if but one month had elapsed since the eventful episodes impressed themselves indelibly upon my memory. I was a keen sportsman, but my experiences had been confined chiefly to small game, and, though I had made some attempts to bag large game on foot in a country on the north-east frontier of India, where high grass and lofty reeds, matted and almost impenetrable tree jungles and deep swamps render shooting on foot well-nigh impossible, I had as yet bagged no single head thereof, with the exception of one spotted deer which had but very recently fallen to my rifle in Mysore.

In May, 1882, I was at the Travellers' Bungalow of Goondulpet, in the Mysore district, detained by a heavy cold from proceeding into the forests for

which I was bound. The south-west monsoon happened to be particularly early that year, since it burst during the latter end of May, and I was eagerly anticipating my first rencontre with a bison —an animal which as yet I had never seen.

While thus detained at the Travellers' Bungalow, a bullock-coach one day drew up at the door, and from it emerged a tall man with a thick, but evidently unaccustomed, growth of hair all round his face, from which projected far upon either side an enormous, and very handsome moustache. He walked slowly and totteringly up the steps and entered the bungalow, and it was not long ere we became acquainted. My then new acquaintance, but afterwards valued friend, proved to be Captain (now Colonel) W., of the 43rd O.L.I., who was, without exception, the best sportsman, and best all-round shot, of the many good sportsmen and pleasant shooting companions with whom it has been my good fortune to meet and to shoot, while his unselfishness and generosity in sport equalled his proficiency therein. Captain W. had been encamped during the preceding six weeks in a very feverish locality, and was weak and much reduced after a bad attack of ague, and he was even then on his way up to the hill-station of Ootacamund, with a view to appearing before a medical board. He was out on six months' leave, every day of which he had intended to spend in the jungles, but after the first six weeks—of perhaps the most unhealthy season of the year in those parts—it appeared as if he would be compelled to

leave the forests, and to recruit his health in a favourable climate. After a few days with me, however, W. picked up again, lost his fever, and gave up all idea of the medical board, deciding instead to accompany me in my forest wanderings, and, as soon as I was well enough to do so, we started for a forest-lodge twenty-two miles off.

As a convenient travellers' bungalow intervened at Maddur, nine miles from Goondulpet, and thirteen from the lodge of Molubollay for which we were bound, we broke the journey there. Leaving the Maddur bungalow after dinner one night—W. in a country cart and myself in my bullock-coach, our baggage carts, my pony dog-cart, and our retainers in procession—we set out to traverse the remaining thirteen miles during the night, while sleeping comfortably on our mattresses and pillows.

I am a sound sleeper—as my better half (who often says that she does not know *what* she should do if anything were to occur which might require my being suddenly aroused) can testify—but at about 2 a.m. on this march I was aware of W.'s exhorting me to get up, and to get out my big rifle, as there was a brute of an elephant on the road, which—though the cart-men had been shouting at him—would *not* clear out. W. had his rifle in hand, and was ready for the fray, and it did not take me long to get my 8-bore rifle case from under my bed in the coach, put the weapon together, and load it.

The procession of vehicles had halted, and W.

and I went on into the darkness ahead to look for the elephantine highwayman who had so unceremoniously disturbed our rest.

The high road lay through heavy forest on both sides, and as it was quite dark, W. took the precaution of grasping the shoulder of a trembling old Mahomedan peon of mine, who carried a lantern, and of somewhat forcibly inducing him to light us, thus leaving himself but one hand free for the use of his rifle. I confess that I did not at all appreciate the situation. I knew full well that had the elephant attacked us—as there was every probability of his doing—W. would have been obliged to release the ancient disciple of the prophet in order to use his rifle, and that, to a moral certainty, the peon would have dropped the lantern, and have incontinently "hooked it," leaving us in the dark, with a charging and infuriated pachyderm somewhere or other on the top of us—a situation the danger of which could not possibly be exaggerated. Fortunately no such risk was in store for us; we could see nothing of any elephant on the road, but we heard one breaking bamboos or branches in the jungle to the right hand side of it. We went a little way into the forest, where, in spite of the lantern, it was impossible to see further than a few paces, and though we could plainly hear the elephant (apparently very close to us), we could see nothing.

We therefore returned to the road, and stood on guard until all the vehicles had passed. We then went on, having directed the men not to go so far

as the forest lodge for which we were bound, but to stop for the remainder of the night at the nearest water, which was about two miles off.

Early next morning we got up, had some food cooked by the roadside, took our rifles, and set off to look for the elephant of the previous night, which we naturally dubbed a "rogue." On reaching the place however, instead of the expected tracks of the rogue, we found those of a whole herd of elephants, to interfere with which we had no permission. There was then nothing to be done but to retrace our steps, and to proceed towards the said forest lodge, trying for bison on the way.

The forest consisted of a great diversity of growth. In one part were flat or undulating stretches of mature bamboo jungle—the bamboos standing in large clumps, with plenty of room to walk between, except where elephants had broken them down and spread them about on the ground in a fantastic network. In another, we might enter an open glade, with a few large teak and other timber trees scattered at considerable intervals, which lay at the edge of an expanse of fairly open mixed tree forest, where the large trunks stood as near to one another as their ever-encroaching roots would permit, and where, at this season of the year, a lovely carpet of new, fresh, rapidly-grown grass, of about half or three-quarters of a foot in height, covered the ground. Here and there a deep nullah interposed, containing in some cases one or more "salt-licks," which were well known to the jungle-men who guided us.

Until nearly midday we came upon no fresh tracks of bison, nor did we see any game whatever, except some sambur deer and muntjac—at none of which did we get a shot.

About midday, however, we came upon tracks made during the previous night by a herd of bison. As the grass was then so short that the animals were likely to travel far, and as it was moreover so late in the day, W. did not consider that these tracks were worth following, and we therefore left them to look for fresher signs of the game.

We chanced to come across, and to capture, a regular "wild man of the woods," whom we encountered most opportunely. We suddenly heard a slight noise which the trackers declared was made by a bison, and with the utmost care, and after taking all possible precautions against alarming the expected game, we stealthily crept towards the locality in which we had heard it; and there we found—not the longed-for bison—but a wild and utterly uncultivated jungle inhabitant, who, with a conical basket on his back, was searching for, and digging up roots (the sustenance of his kind and of the wild boar), whose first impulse on seeing us was to bolt into the depths of the forest. A little reassuring, however, upon the part of the jungle-men who accompanied us, and who were only his more cultivated brethren—though they differed from him in appearance far less than does a town "masher" from a country bumpkin—showed him that we were neither elephants nor tigers, and that we required not *his* blood, but that of a bison;

and we were eventually able to induce him to accompany us, in order that he might show us where the object of our search could be found. He certainly was *not* a prepossessing animal, but might, did not gratitude for his services prohibit it, be termed a most filthy and highly repulsive one. His large masses of grizzled hair were matted together, a dirty rag round his loins constituted his only apparel—if I except his native dirt, wherewith, as the olfactory nerves of even a native cook might have testified, he was clad as with a garment, —and the conical basket on his back represented his stock in trade. Simple and happy jungle wallah! Never wilt thou know what it is to possess wants (and possibly duns) far beyond thy means to satisfy! Never will the gnawings of unrequited love, or the cravings of unsatisfied ambition rack thine innocent soul! For thee, the world outside the forest may wag as it may, kingdoms may rise and fall, the world be electrified by stirring events which cannot but exercise the soul of every civilised human being who can read a newspaper! India itself might pass into the hands of Russia, nay—worse fate still—it might even fall into the rapacious clutches of the Bengalee Baboo, but what wouldst thou know, or care, about all such (to thee) trifles unworthy of knowledge or consideration? Freedom to dig thy roots, and to collect thy honey in the forest in peace, and a few bamboos and a little thatch to rig up thy simple abode, are all thy needs; and thy sole anxieties are the avoidance in thy wanderings

of the dreaded rogue elephant, and the escaping in thy humble hearth of the destructive small-pox!

Taking our newly discovered wild man with us, we constituted him our "guide, philosopher and friend," and followed him through forest of varied character, till we reached some high ground covered with only a stunted growth of short stuff and tiny trees, which latter are not termed "saplings" only because they were too old to be so called.

While passing through this, I happened to notice a dark object on the ground, but before I had at all made it out, it sprang up and rushed off, displaying the noble proportions of a fine bull bison.

W., who was carrying his ·577 express, at once fired both barrels as the bull rushed through the little trees, while I grabbed wildly for my 8-bore rifle which was being carried by a man behind me. Cocking and pitching it, just as if I had been firing a snapshot at a snipe, I fired; the bull collapsed at the shot, and fell to rise no more.

We went up close, and found that, though there was still a slight muscular movement, the animal was dead to all intents and purposes, my bullet having entered the spine through the neck. One of W.'s bullets had hit him in the rump, but the other had apparently been taken *en route* by one of the before-mentioned trees, for it was nowhere in the animal, and as I since had ample means of knowing, it was seldom that W. missed a fair shot in the open; though in cover, in firing a running shot, no one, however first-class a shot he may be,

can avoid sometimes having his bullet intercepted by a tree ere it finds its intended mark.

My own delight at having thus (though by an utter and most fortunate fluke) knocked over and bagged — by a running snapshot, too — the first bison which I had ever seen, may be better imagined than described. I may add, however, that I afterwards missed several fine standing shots before I bagged another!

Although of course, by the strict law of sport, the head of this bull belonged, not to me, but to W. who had first hit him, that generous fellow simply refused to take it, and it formed one of a batch of trophies which, some two years and a half later, I took home to the paternal roof.

Having cut off the bull's head, which we left to be subsequently brought in, we set out for the forest lodge to which we had sent on our camp when we started early that morning to look for the disturber of our previous night's rest.

We had proceeded for, I suppose, only about half an hour, when, again without our finding any fresh tracks, and without any warning, a solitary bull jumped up and rushed off, followed by a second bull who was in his company. W., who was carrying his express, fired both barrels, and was in hot pursuit of one of the bulls before I could get my rifle from its bearer, and he then, after taking a fresh rifle, put in two more shots, followed by a fifth from a single-barrelled weapon of large bore. As soon as I could get my rifle, I pursued, and arrived, very much out of breath,

at a spot where W. was standing with empty rifles, and the bull also standing with a broken shoulder. The bison faced round, looking a truly magnificent beast, and W., telling me to keep an eye on him in case of his charging, proceeded to reload his rifles. The bull standing thus in an open glade, watching us face to face and appearing as if very much inclined to charge, was one of the grandest sights which I have ever witnessed in bison shooting.

W., having reloaded his rifles, told me to take the bull in the neck. I did so, and he fell, but jumped up again. W. now opened fire and knocked him over, and, as he lay there alive, W. told me to brain him by a shot between the eyes. My bullet was, however, too high for the brain, and then my companion killed him by a shot behind the ear.

Though both were old, solitary bulls, the second was a larger animal than the first, and also carried a finer head, the horns being wider across the sweep, and much worn down, and the head altogether more massive and imposing.

Once more we proceeded towards camp, but before we reached it, we came upon very fresh tracks of a herd of bison, and, though we saw them, they became alarmed, and went off before we could make out the bull, and so they escaped without being fired at.

This, my first day at the noble game, is the best day's bison shooting which I have ever enjoyed, though a good many fine heads have

since fallen to my rifle. It is not very often, in the forests in which I have shot, that one chances upon bison without having first found and followed their tracks for some distance, and our doing so twice upon this day was a somewhat curious coincidence. I am quite unable to determine whether it was sheer luck, or an intimate knowledge of the locality and of the habits of the game, which enabled our shaggy and odoriferous guide to lead us up to them so fortunately. He stayed a few days in our camp, and then vanished, without saying "good-bye," or even asking for remuneration, —very unlike the conduct of the ordinary native!

The two bulls, whose deaths form the subject of this narrative, carried heads measuring thirty-three and thirty-seven inches respectively across the sweep, the first being an ordinary solitary bull, and the second a fine one; in fact, its head was the best of the six bull bison heads bagged by W. in this trip, and the latter was far too good a sportsman to intentionally fire at an animal carrying a small head.

THE BULL WHO CAME TO LUNCH WITH ME

One monsoon day I rode with my wife, who was out in camp with me, from the forest lodge of Rampore, in the Ainurmarigudi forest, to the recently mentioned Molubollay lodge in that of Berrambadie.

After reaching the latter, I went out shooting with my men, and before long we found the tracks

of a single bull. After following these for some little distance, we found that a second bull had joined the first, and it was evident that the pair had gone on together in amity—or, at least, without any serious disagreement — for some time. Then we came to a place where they had had a furious "set to," the ground in a circle being deeply ploughed up, and saplings broken down during the tremendous duel. A little further on we found another such ring, where a second "mill" had taken place, and a little further still a third.

The tracks then led into those of a herd; and though we tried hard to find a bull's track going off alone from the area over which the tracks of the former were spread, we were quite unable to do so, and were obliged at last to follow the herd, believing that the two bulls had joined it.

On coming up with the bison, I saw two or three animals, but could not make out a bull; and the herd, having possibly got a hint of our presence, or else on account of being worried by flies, went off up a hillside.

It was then nearly midday, and I reflected that if we were to follow the bison forthwith, we should be likely to come up with them when they were lying down in long grass, and that it was therefore advisable to give them time, and to follow the animals later in the day, when they would be grazing in the open. I accordingly sat down on a fallen log, and ate the sandwiches which I had taken out with me, my men sitting facing me

under a bamboo clump, a short distance off, with my rifles.

I had just finished my lunch and had lighted my pipe, when, most unexpectedly, I saw a single bull coming from the direction in which the herd had gone. He was trotting sulkily along, disgust and disappointment being clearly visible in his demeanour, if not written upon every feature of his face.

My men, behind whom he passed, did not see him, and their astonishment was great when I cautiously, but rapidly, went over to them, took a ·577 express, motioned to them to remain where they were, and pursued the bull. He turned end-on, leaving me only his stern to fire at, and I followed, waiting for him to turn once more and so expose his side. He had not discovered us, and was not alarmed. Presently he pulled up, and altered his course by moving slowly to the left, whereupon I fired. The bull, though hard hit, went on; I called up the men, and we followed his tracks. Soon we came up with him again, but it was not before I had hit him several times more that I bagged him. Once we came upon him standing with only part of his head visible, the rest of it being hidden behind a trunk, his vitals also being covered. I fired at his head and missed, my bullet going into the tree. At this shot, the bull came prancing out across me, with his head down, in highly comical bounds. He looked as if each horn were tied to the fetlock on the same side, and, though he had not the slightest intention

of charging, this demonstration was apparently made with a view to leading us to suppose that he was quite willing to do so—in fact, that he quite intended business.

After killing this bull, I found a lump on the withers which I knew must be caused by a bullet under the skin, and on cutting through the latter, I picked out an 8-bore rifle bullet. As the bull was shot from the very camp at which Colonel N. C. had his great adventure previously related with a wounded bison, and as the animal was standing facing him when he fired, it is quite possible that this bison was the one which so severely maltreated that highly distinguished officer three years previously.

The bull was coal-black, with very little hair on his body, and though a magnificent beast in size, his horns were small, yet they were worn down at the tips. Colonel N. C.'s antagonist had, he told me, very short horns.

As I had shot the bull early in the day, our camp being only a few miles off, I determined to return at once and take my wife out on her pony to see the slain monster. The ayah (ladies' female attendant) and another native servant both asked to be allowed to go too, and received permission, but though my wife and I got back to camp in good time, the servants delayed so long at the carcass that they were benighted, and did not reach camp till next day! Possibly their object was a "square meal" of beef!

A WONDERFUL FLUKE

I once bagged a grand bull by an exceedingly lucky fluke, and the story is so remarkable a one that it is worth relating. I was out in camp in the Metikuppe Forest with my wife. As there was no forest lodge in the vicinity, we were dependent upon tents for our lodging. Upon the day on which we were moving camp, and had a ten-mile march to perform before evening, I decided to go out early to try for bison before starting.

I went out with the Kurrabas, and we tried hard, but could find no fresh tracks. Despairing of bison, I fired a shot at a jungle-sheep (muntjac), which obtruded itself upon us, but missed it.

After firing this shot, I had even less hope of doing anything with bison than I had before, and simply loitered on through the forest with my men in a somewhat aimless fashion, when all of a sudden, and only about 200 yards from where I had fired, we heard a bison dash off from a dense thicket close by. On finding the tracks, it was evident that the latter were those of a big bull, and though I entertained but a slight prospect of coming up with him again within the short time at my disposal, we started in pursuit.

It was a weary, stern chase, and the odds were against our succeeding; still, I began to be hopeful, when at last, after galloping a long way, the bull (as we could see from the tracks) subsided into a walk. We had a long way to follow after that,

before, very suddenly, as we came to a nullah densely covered with bamboo, a Kurraba tracker stood still, and excitedly pointed into it. I saw something very dark, and fancied that I could make out also the lighter-coloured hair under the fore-arm. Delay was dangerous, and I fired at what I saw with the ·577 and 6½ drachms. After the shot all was still. I heard no rush, no clattering hoofs, and, in fact, no sound at all, and I turned round to the Kurraba and cursed him for inducing me to fire at a stump. He replied that it was not a stump, but a big bull bison at which I had fired. I went on, and, sure enough, there were the huge hoof-marks up the soft bank of the nullah, and on through the forest, and there was blood on the track. After following for a short distance, we found the bull—a magnificent animal with a splendid head, measuring 35½ inches across the sweep—lying stone-dead, the little bullet having hit him accurately behind the shoulder!

THE DEATH OF THE 40-INCHER

I was in camp at Kalkerra, in the Ainurmarigudi forest, about ten miles distant from the already mentioned Rampore lodge in the same forest. The weather was very wet, and therefore most propitious for bison shooting, and being out on duty and yet desirous of obtaining a little sport, I applied for three days' casual leave, and availed myself thereof in anticipation of sanction.

On the first day I had no luck, and a long, running shot at a herd bull resulted in a miss.

On the second day I went out with my men fairly early, and after a good walk we found the tracks of a solitary bull. We followed for some distance, the tracks being evidently very fresh, until at last one of the trackers called my attention to a bamboo, which was shaking in a jungled nullah ahead. Soon I was able to make out the bull, who was standing broadside on, and I fired a bullet from the ·577 at him. At the shot the bison stood where he was, and I then fired the second barrel with the same aim. After the second shot, the animal went up the further bank of the nullah, and stood and snorted; the men, anticipating a charge, handed me an 8-bore rifle, and bolted. I fired at him either once or twice, and he then went on, and we proceeded with due precautions to immediately follow him up.

Twice or thrice we came up with him, and he seemed very much inclined to fight, but, although evidently debating the advisability of a charge, he retreated upon receiving further punishment. Finally, we got close up to the bull, who was now standing completely hidden in young bamboo and long grass. We could hear his objurgations, but could not see him. There was a tree at the edge of the thicket, and I thought that this might be useful to dodge behind in the event of a charge. I sent a man up this tree, and he saw the bull standing only some twenty or thirty yards off. The animal knew where we were, and became

more and more excited, as we could divine from his somewhat "cursory" remarks. At last he charged, and I waited behind the trunk for him to expose himself in his rush, but this he did not do, for after he had shown me only the tips of his horns and the top of his dorsal ridge, his heart failed him, and he retired once more to the thick cover. Eventually a Kurraba caught sight of a small portion of his head and pointed it out to me, and I fired, but missed, though the shot had the effect of sending him out of the thicket, upon which I was able to give him another body shot, whereupon, after following for a short distance, we found him lying dead in the long grass. I had, in all, fired about a dozen shots at this bull, though he was quite unable to travel far after the first two or three.

He was very old, in wretched condition, with protruding, hairless ribs, and teeth quite loose, and yet, curiously enough, was not really black. He had a deep wound (in which were maggots) in his forehead, and had, I suppose, met with this injury in some dispute with another bull.

A FORTUNATE SNAPSHOT

I went out with my men one morning in the Karkenkotta forest in Mysore, intending to have a day's bison shooting, it being a public holiday. We found tracks of a single bull in a swamp, and had to follow them for a long distance.

The bull had grazed a great deal, but had also travelled, and we probably followed him over the greater portion of his night's wanderings, as well as over the ground traversed by him during the early hours of the same day. The sun was high, and the day hot, when we arrived at a dense bamboo cover through which the tracks led; and my hopes fell, for I well knew that under such conditions the bull would certainly be lying down, and that my chance of finding him grazing in the open was gone.

After going through the thick cover for some distance, I heard, what I had for some time been expecting to hear, viz., the rush of the bull as he dashed off alarmed. I could not tell how far the thicket extended, but, just on the bare chance, I rushed a few paces forward, and at once came upon an open, and saw the bison dashing madly across it. A huge blackwood log, about three feet or more in diameter, which had been felled and squared by the Forest Department, lay in his path, and I pitched and pulled a snapshot with the 8-bore just as he took a flying leap over this obstacle. I did not for a moment imagine that I had hit him, but, just as a matter of form, went up to the place and a little way along the track, when, to my great surprise and delight, a Kurraba picked up a fallen leaf with a single spot of blood upon it. We followed the tracks, found more blood, and I at last came up with the bull, and after some more shooting and following, I bagged him. My first bullet, which was fired from directly behind him,

had simply "skiffed" along outside the ribs, not cutting the skin all along the line, but missing the portions of it overlying the intercostal spaces, and had then entered the fore-leg and thus lamed him.

THE BULL AND THE WATERPROOF

The Bandipur jungle differs from most of the forests of the Mysore district in being more hilly, and in parts far more open than are the others.

One afternoon, after a long tramp during which not a bison had been seen, I had reached a very open portion where grassy hill-slopes are the rule, and cover the exception. It had been a luckless, weary day, and rain had rendered walking uncomfortable, and as I wandered over this open expanse in the hope of seeing a bear out feeding, and after slope after slope, and hillside after hillside, had been searched in vain, I thought that I should have to record a blank day.

It was still raining hard, and I had on a white mackintosh coat, and was roaming dispiritedly over some open grass with a patch of cover on our right, when, instantaneously, one of my men stopped and pointed in that direction.

Thinking that he had seen a sambur or a bear, I took my ·500 express, but he motioned me to change it for the 8-bore. I had as yet seen nothing, but at last I managed to make out, between two trees, the head and chest of a bull bison standing staring at me. He had evidently never seen a white mackintosh before, and his curiosity so far

overcame his fears that he stood gazing at it while the man had time to point him out to me, while I could take my express from one of the men, and then change it for the 8-bore, and until I was able to make him out and fire at him. One bullet in the chest from the 8-bore laid him low, and another from the ·500 express brained him.

A FORTUNATE HEAD-SHOT

Although, as a rule, a head-shot at any animal, except an elephant, is to be strictly avoided, it now and then happens in bison shooting that the sportsman must either take it, or lose his chance altogether. In such a case, the head-shot should be tried, the sportsman bearing in mind that what he has to aim at is an imaginary line drawn between the eyes,—unless, indeed, the bison be standing with his nose elevated, in which case he must fire at the top of the cartilage of the latter.

It was once my luck to bag a bull with a head measuring 37½ inches across the sweep, which, although it was not dropped dead upon the spot, would not have been bagged at all had the head-shot not been attempted.

Two miles from Lakwallie (in the Kadur district of Mysore) is a large area of teak plantations of different ages, lying sometimes on one side, and otherwise upon both sides, of the Government road, for a distance of about two miles from its commencement to its end.

The most distant portion is the youngest, and as

teak seedlings make very little show till at least the second year, that portion was very open, and animals in it could sometimes be seen from the high road.

One afternoon in the monsoon, I went out in the Lakwallie forest behind the plantations, and worked my way round to a point on the Government road at which I had ordered that my riding mare, sent on in advance, should be kept waiting for me.

In my round through the forest, I came upon no tracks of bison fresh enough to be worth following, and, having reached the high road, I mounted my mare, and rode towards the Lakwallie bungalow, some six miles off, leaving the men with my battery, etc., to follow. After riding about two miles, I came to that end of the plantation which is furthest away from Lakwallie, and there, in the plantation, but not far from the jungle which borders the latter, I saw a single bull bison out grazing. I dismounted, got out of sight, and went back along the road to meet my men. On returning with them to the place from which I had seen the bull, the latter was still plainly visible, but he then moved off, though leisurely, into the jungle. The men expected that he would emerge again from another point and continue grazing in the plantation, while I felt very much afraid that we should not see him again.

We had to make a détour in order to prevent the wind from betraying us, and then went up to a corner of the plantation, the teak saplings on

which had failed owing to unsuitability of soil, and which had therefore been abandoned, a dense growth of young bamboo having sprung up all over it. This thicket adjoined the forest in which the bull had disappeared. All of a sudden, a forest peon who was with me pointed forwards, and there, close in front, was the head of the bull standing staring at us. I fired a solid bullet from the ·500 express, hoping to brain him; but off he dashed, and I ran through the thick bamboo growth in the direction in which he had gone, angry with myself for firing a head-shot, and scarcely hoping to see the animal again. Imagine my delight when I saw the bull rolling over and over down the hill-side above us! He would soon have got up again, however, had I not got in close to him as quickly as possible, whereupon two body-shots from the 4-bore, and another from the ·500 express, finished him off.

The bull must, after running for some distance, have become giddy from the effects of the head-shot, and as he fell on a steep slope, he rolled till he came to fairly level ground. Altogether the bagging of this bull was a piece of extraordinarily good luck.

THE BULL WHO DIDN'T CHARGE

Twice in one day I have had different animals, viz., an elephant and a bison, run almost over me, though neither of them had the slightest intention of fighting. A novice would have considered that he had been charged by both! The elephant

incident will be related elsewhere, but I will mention that of the bison before closing the subject of bison shooting, as it is a somewhat remarkable instance of the way in which wild animals are apt to occasionally run into the very danger which they are trying to avoid.

I had gone out early, and had encountered and fired at the before-mentioned tusker elephant (who escaped), when we came across the tracks of a solitary bull bison. After following these for some distance, we found a form in which he had been lying, his open hoof-marks leading therefrom indicating that he had galloped away in great alarm, having evidently got our wind before we had approached sufficiently near to hear his precipitate rush.

Now a stern chase of this description is likely to be a protracted one, for an old solitary bull, who has doubtless been frequently fired at during the course of his long life, is usually very cunning; and although bison, if alarmed early in the day, *before* they have had time to lie down and to chew the cud, may, if pursued, be come up with again and again, yet if the same animals be seriously alarmed *after* they have had time to perform this highly necessary function, they may frequently be followed in vain till evening.

In this case, the bull kept to the thickest cover which he could find, and the hunt was a long and weary one. At last, however, we emerged upon a large extent of very open forest, beyond which lay the Mysore – Sultan's Battery Government

road. Here, to my great surprise, I saw the bull coming slowly back, half across and half towards us, having evidently been turned by the road or by people or carts passing along the latter, but he was not seriously alarmed.

I dared not fire at him at so great a range—I guessed him to be about 200 yards distant—with one of the 8-bores, of which I had two (a gun and a rifle) out with me, so I fired at his chest with the ·500 express, the bullet used being an extra large solid one. At the shot the bull came so straight for us that one of the Kurrabas handed me an 8-bore, and then he and the other men at once bolted, thinking that the animal was charging. He rushed blindly past me within a few paces, when (after a miss from the first barrel) a bullet from the 8-bore in the body knocked him over on the spot, and brought the long chase to a very fortunate conclusion.

Whether the little bullet from the express, which had hit the bull on one side of the chest, could have affected him sufficiently to enable us to come up with him again had he elected to bolt in another direction, I am not prepared to say, but he would undoubtedly have given us much labour and trouble had he acted otherwise than exactly as he elected to do.

This was a grand old bull with a splendid head, and I was delighted with my trophy.

I think that I have now given sufficient incidents in bison shooting out of a somewhat extensive experience of that sport, so I will close this chapter.

CHAPTER V.

HINTS TO BEGINNERS IN BISON SHOOTING

IT sometimes happens that a novice, who wishes to go out bison shooting, is obliged to do so without the advantage of the company of an old hand to show him how to set about it.

Of course, if a beginner can arrange to be accompanied for the first three or four days by an experienced sportsman, he will learn much from the latter, and will thereafter be able to go out alone with a good chance of success; but as it is not infrequently the case that he must needs go alone, or with another tyro as new to the work as himself, and in the hope of such being useful in these cases, I propose to give a few detailed hints of the *modus operandi.*

Two men cannot shoot together without sacrifice of sport when this particular game is the object of pursuit, except when an experienced sportsman takes the beginner under his wing, and is (as any true sportsman will be) willing to forego his own chance of shooting until he has taught his pupil sufficient to enable the latter to go out alone with some knowledge of his game. If, therefore, two beginners should arrange to go on a bison

shooting expedition together—and I should recommend this arrangement as far more pleasant, and in every respect preferable to a solitary trip—they should daily go out separately in different directions. In the evening, when they meet in camp, it will be delightful for them to talk over the incidents of the day, and each will learn something from the experiences of the other.

We will suppose, therefore, that two novices have arranged to go out on a trip to bison ground, and that they want to know from the beginning how to set about it.

The first point to decide is the country to be worked, and their selection of this will, no doubt, mainly depend upon the place at which they may be stationed (supposing that they are military), and whence they mean to proceed to their shooting grounds.

Upon this decision will largely depend the amount and description of the requirements to be carried with them, since, should their choice be to work hilly country, they must travel with the lightest possible equipment and very small tents, whereas if low-country forests, where carts can be taken, be selected, comfort should not be sacrificed to extreme lightness of kit.

The next point will be to ascertain whether any, and if so what, leave or licence has to be obtained, and from what Government (the Travancore hills are under the Travancore Government), and then, if possible, to obtain the assistance of the local officials, more particularly of the forest officer and

the nearest revenue official of high rank. The reasons for this are enlarged upon in the chapter treating of tiger shooting.

In the higher portions of the hill ranges of Southern India inhabited by bison — notably the Western Ghants, the Travancore hills, and the Anaimalais, and in a minor degree the Pulneys, the Nelliampatties, and the Brummagherries—large expanses of open, grassy hillsides and downs, and small swamps, alternate with dense covers (called sholahs) in the dips and sheltered depressions.

In working country of this description, it is essential that no more than absolute necessaries should be carried, since the sportsmen will have to depend entirely upon pack ponies or pack bullocks (the former being preferable) and men for porterage of all their requirements. Such means of transport are expensive, and, even if economy be no consideration, the necessity for carrying food for the men, and the difficulty of procuring coolies in many places, combine to render it highly advisable to limit the loads as far as may be practicable.

Before finally deciding upon any locality, it is of vital importance that the sportsmen should ascertain whether the ground they would like to try be above fever range or no. The height at which malaria prevails appears to vary considerably, but it may, I think, be safely stated that, at an elevation of 5,000 feet and above, there is no fear of malarial fever save under very exceptional circumstances which need not be looked for. I lay much more stress upon

this point in the case of hill shooting than in that of the low-country forests, since, in the former, carriage of soda-water is out of the question, while in the latter plenty of this refreshing beverage should always be carried, and no jungle water be ever drunk unless it has been boiled in making tea or coffee. Native servants are in the highest degree careless and untrustworthy; they cannot be relied upon to boil water before filtering it, and they are very apt to filter it only, both because this gives them little trouble, and also on account of their master being able to tell from its appearance whether it has been filtered or no, whereas he cannot possibly tell whether it has, or has not, been *boiled.* The recent theory is that carbonic acid gas in solution destroys all germs within fourteen days.

The early showers in April and May cause the rapid springing of new grass after the burning of the old growth in the hot weather, and these months are excellent for hill shooting, *provided only that the locality where the camp be pitched is above fever level;* if below it, this period is very dangerous, on account of malaria. Once the big monsoon has burst—generally early in June—the sportsman will be glad to hurry away, for the heavy rain in a cold atmosphere renders camping out quite impossible. After the cessation of the rains, the cold weather appears to be a healthy time in the Travancore hills, but the great disadvantage then is the height of the grass in most parts of the bison ground.

I would recommend no one to go out shooting in the hills unless he can camp at such an elevation that he may safely drink the water unboiled. It would profit him not at all were he to go to a fine shooting country, make a big bag of good bulls, and then die of malaria, as did the late Lieutenant R., R.A., only a few years ago. This was an extreme case, and the only one I have known of a sportsman being killed by malaria while actually out on his trip; but many men have suffered severely for years from malarial fever contracted while out shooting, and I would recommend every visitor in localities of doubtful salubriety to omit no precautions which may tend to preserve his health. *Mens sana in corpore sano* are the two main conditions essential for the enjoyment of life, and we cannot be too careful in the preservation of that inestimable boon—good health.

For two sportsmen out together in the hills, I recommend the following kit:—

Tents.—One eighty-pound field officer's Cabul tent (double-fly, with bathroom) for each, for sleeping, dressing, and bathing in; one light single-fly tent, nine feet square, as the common dining and sitting room; one light rowtie for the servants.

Cooking Utensils.—One kettle, one frying-pan, two saucepans, one digester, two kitchen knives, and one chopper.

Crockery and Cutlery.—Sufficient white enamelled ware, tumblers, and cheap knives and forks, for the use of two.

Camp Furniture.—Two light folding camp cots, with mattresses and pillows to fit the same; four light folding camp chairs; four pieces of light folding camp table (Messrs. Oakes and Co., Madras, have supplied me with these); two folding camp looking-glasses; two small candlesticks; two travelling baths fitted with baskets for holding clothes; two D.P.W. lanterns, and two common hurricane lanterns, with spare chimneys for all; two wash-basins with leather covers and handles; and two folding tripod washstands.

Liquor.—Sufficient for the trip, depending upon individual requirements.

Tinned Provisions and Stores.—Soups, bacon, jam, hams, lard, potted meat, flour, baking powder, vegetables, Swiss milk, butter, cheese, fish, and fruits, of each sufficient for the trip; also ordinary stores, such as tea, coffee, sugar, candles, ghee, salt, pepper, mustard, potatoes, onions, and rice; common rice and curry stuff for the men, wicks and kerosene oil for the lanterns.

Miscellaneous.—Some medicines, arsenical soap (and brushes for applying the same), turpentine, common carbolic acid, bedding, linen, etc.; two very stout waterproof bags with locks and keys for the bedding; half a dozen empty and *thoroughly clean* kerosene oil tins for holding water; tin openers and corkscrews, an axe, a chopper, a spade and a crowbar, half a dozen skinning knives, vaseline for cleaning the rifles, two luncheon baskets, two waterproof sheets, and two hundred $3\frac{1}{2}$ inch nails for pegging out skins to dry.

Some fat sheep should be driven up from the plains *by short marches*, and a number of fowls *in baskets* should also be taken. The sportsmen should insist upon baskets being used for this purpose, since natives have no regard whatever for animal suffering, and treat the miserable sentient creatures, who are unfortunate enough to be in their power, as if they had no more feeling than blocks of wood. Consequently, if allowed to do so, they would tie the wretched fowls' legs together, and, slinging a number of them by passing a stick between their legs, would carry them, with their heads hanging down, for any distance under a broiling sun.

Rifles and ammunition have not been included in the above list. If there be—as is probable at a high elevation—ibex (the Nilgiri wild goat) within reach of the camp, a ·303, ·450, or ·500 express rifle should be taken by each sportsman; while for use upon bison, a ·577 express each will suffice, though if either of them should happen to possess an 8-bore gun or rifle, he should take it as a second gun when out in search of the larger game.

When shooting in the hills, a first-rate telescope should be carried by one of his men, and in his own pocket the sportsman should carry a pair of "Lilliput" binoculars.

The tents forming the camp should be pitched in a sheltered situation near to running water, and, if possible, as previously recommended, at an elevation of not less than 5000 feet.

The sportsmen must *insist upon trenches of sufficient depth* being dug all round the tents, if the latter

are on flat ground; and along three sides, if the ground be sloping, a shallow trench along the lowest aspect being sufficient in such a case. Rain may fall at any time, and if, through laziness, the servants have omitted to see to this necessary precaution, the tents may be swamped.

Having reached, as soon after dawn as may be possible, a commanding situation from which the sportsman hopes to view his game, he should, if possible, get under cover; or if none be available, at least take care not to linger on the sky-line, but sit down below the latter, take his telescope, and thoroughly inspect any likely country within range of his glass.

It is possible that he may chance to view a bull from his first point of observation, and if so, he has only to carefully plan his stalk, first, by noting the exact direction of the wind, and also looking out for any valley or gully in the vicinity of the game, up which a gust might blow at any angle to its prevailing course; and then, by seeing of what cover he can avail himself during his stalk—to be made along such a line that during no portion of it will the sportsman be between the game and the direction of the main current, or of any minor or local currents of wind—to decide upon, and mentally take note of the points through which his approach to the game must be made; and finally to get in as close as possible to the latter without being seen or heard by it.

The rest is a mere piece of straight shooting at a large bull's-eye, since, if he puts a ·577 solid

bullet driven by $6\frac{1}{2}$ drs. of powder through, or just behind, the shoulder of the bull, he will most certainly bag the latter, though he may, or may not, have to give him another shot (or shots), according to the organs which the first bullet may have penetrated. And here let me recommend all beginners on no account to fire at *an animal*, but to carefully aim at an *imaginary bull's-eye* on the very portion of its body which he may desire to hit.

A common impulse of most tyros is to fire at an animal directly they see it, for fear that it should bolt, and a miss, or a wound so badly placed that the recipient escapes, is the usual result. In firing with an express, I always, where it is practicable, sit down before pressing the trigger. Great steadiness can be obtained by sitting with the heels close together, the knees well separated, and the elbows resting one on each knee. But sometimes, in the jungles, game visible on foot cannot be seen when sitting, and in such an event the shot must be taken standing. Coolness and absence of hurry are the main essentials for steady shooting at big game. It is preferable that no shot be fired than that a wounded animal should escape.

Far more game is missed, or wounded and lost, through the sportsman's having fired too hurriedly, without accuracy of aim, than escapes through any want of quickness in firing. Let the novice bear this carefully in mind.

I cannot say that I should care to fire either my 8-bore or 4-bore ball guns in the sitting position,

but prefer to stand when using *them.* One or two more remarks I may make regarding bison shooting on the hills, viz., that in some parts leeches swarm in the sholahs. One fairly effective means of protecting oneself against the attacks of these bloodthirsty pests is the use of putties, which must be coiled pretty tightly in putting them on, and tied securely, otherwise they are liable to become loose, or to come down altogether. Leech-gaiters too may be worn under the ordinary stockings.

I strongly counsel the European, camping on hills where bison are to be found, to trust to nothing less protective in the shape of head-gear than one of the "shooting shape" "Sola topees" made in the country.

The sun is to be *feared*, and if once a European should unfortunately suffer from a touch of it, he will be very apt to be similarly affected upon subsequent exposure. Sunstroke is no trifling malady, but one against which proper precautions in the shape of a good topee are most advisable.

For hill shooting, boots, though they must be of stout leather, should not be too heavy; otherwise they become tiring during a long day's walking. A *few* nails *which will not penetrate the inside of the sole* (a common fault in the case of Indian-made boots after a very little wear) are useful.

I recommend that the boots be made large enough to admit of really thick stockings being worn, and I advise sportsmen to eschew altogether the miserable, flimsy stockings so often sold in the country,

and to wear nothing but thick English woollen knickerbocker stockings.

For shooting in the hills knickerbockers are most comfortable. It is unnecessary to obtain new ones of any particular material, since any of the sportsman's old trousers may be cut down and converted into them, so long as the cloth is not of a staring or conspicuous colour. For coats, the ordinary Basel Mission Shikar cloth (manufactured at Cannanore, in Southern India) is the best material, though in the cold weather and in the rains, something warmer —say an ordinary tweed coat of fairly neutral hue— will be found comfortable.

In any case, the sportsman in the hills should, if he be in the least degree liable to catch cold, take out shooting with him (even in dry weather) a warm overcoat. This should be of mackintosh covered with tweed, for such is useful both in dry weather and in rain. Of course it will be carried by one of his men.

After fagging up a steep hillside, and having got wet through from perspiration, a bitterly cold wind is often encountered on the top of the ridge. The sportsman may need to sit down for some time while he examines with his glass all the country within sight of him, and if he does this without putting on an overcoat, he is very liable to catch a chill.

I question whether it would be an exaggeration, were I to say that half of the illnesses from which Europeans out in India suffer are the result of chills.

Should the locality selected lie within the forests of the low country, the sportsmen will find the south-west monsoon *the best* time to go out bison shooting. In Mysore, as has been already stated, malaria practically ceases in that monsoon, and as the amount of rain which falls during this period is not excessive (except in portions of the Kadur district), this season is an extremely pleasant one for a forest outing.

The 15th of June is a good day to fix for the start, as the monsoon nearly always bursts before that date, but I would not advise sportsmen to go into the forests before the latter is fairly on, and therefore before the heavy rain which ushers it in has washed away the germs of malaria.

I recommend the sportsmen to take one hill tent, fourteen feet square, for themselves, and a rowtie for their servants; but, if luxuriously inclined, they might take a second hill tent for their own accommodation.

In some places they will find forest lodges, and they should ask the district forest officer to kindly permit them to occupy these when he does not personally require their use. An ample supply of soda-water should be carried, and not a drop of jungle water drunk unless it has, *to the sportsman's own knowledge*, been boiled.

Folding camp cots, standing as high from the ground as can be procured, should be taken, as also mosquito curtains of fine net, or, if the weather be cool enough to admit of their use, then better still of "Mul Mul." Without getting them specially

made, it is not easy to procure camp cots of, say, 2 feet 9 inches in height, but it is better to have such constructed than to run any risk of incurring malarial fever. Although, as I have stated above, malaria practically ceases in the monsoon, a dry period may supervene in which it can be revived; and it may, and, I doubt not, does, linger at all times in certain unfavoured spots. The higher above the ground the sportsman may sleep, the less risk there is of his suffering from malaria—even during the unhealthy season in the forests—and he *must at all seasons sleep under mosquito curtains.* The mosquito curtain has long been recognised as a safeguard against malaria, and a medical savant has now propounded the somewhat startling theory, that the poison of malaria (so-called) is in reality originated by a diseased condition *in the mosquito itself*, and is conveyed and communicated to man by that insect, and many elaborate experiments are being performed to test the truth of this proposition.

The remarks, under hill shooting, on the necessity of obtaining a shooting licence (where one is required), and of asking for the assistance of the revenue and forest authorities, apply with equal force in the case of the low-country forests.

For bison shooting in the latter, I prefer boots of soft native leather, made, as I have previously recommended, *without heels*, and furnished with only a few small nails to prevent slipping. Heels make such a noise as no one who has not tested it would believe possible, and the "tump tump" of

heeled boots should be avoided where one very frequently gets extremely close to game before seeing it. I used to get my shooting boots made by a native chuckler. They did not last long, but then they cost only Rs. 4 (about five shillings) per pair, and they were soft and did not gall the feet.

After a day's shooting in wet weather, boots should be filled with horse-gram, or with oats, to dry the insides by absorption, and be, moreover, well greased outside. If boots used in wet weather should have been allowed to dry and get hard without the use of any lubricant, the best emollient is castor oil. The tongues of all shooting boots should be stitched on to the uppers right up to the top. Most sportsmen consider that a brown, canvas-covered Elwood's topee is sufficient protection in forest shooting during the monsoon, but personally I prefer the topee recommended above for use in hill shooting. When wearing one of these in the monsoon, a mackintosh cover to slip over it in the event of rain coming on is very necessary, otherwise the hat will absorb a great amount of water, and will feel nearly as heavy as lead. I have also taken out in my luncheon bag a soft felt "terai" hat, which I have worn when there was no sun (or during rain), exchanging it for my sola topee whenever the sun reappeared, and this is a plan which I can thoroughly recommend. Of course, in very wet weather, with a total absence of sun, or in very dense forests, wherein one is always under partial shade, an

Elwood's brown topee is about the best head-gear; still, I should not care to do much work in the sun in it, and it must be remembered that, though at starting from camp in the morning it may be wet and cold, a hot sun may come out at any time during the day.

The sportsmen can suit themselves as to clothes, but I recommend the same for bison shooting in the forests on the plains, in the monsoon, as I did when treating of hill shooting.

A mackintosh coat with sleeves, and cut short to about the knees, is very useful to slip on in heavy rain, and may save the sportsman who carries one from many a chill—less by keeping him dry, than by keeping him warm.

In the dry weather, however, I recommend, in place of tweed knickerbockers, breeches of the above-mentioned Basel Mission Shikar cloth, made to button round the leg just above the boot, and a pair of soft, flexible, light gaiters over these—provided only that there are no leeches in the forest, in which event leech-gaiters or putties may be worn.

Upon carrying cartridges in the monsoon, something must be said. All cartridges taken out in wet weather should be made waterproof by smearing round the cap in the centre of the base of the cartridge an atom of a mixture made by melting together bees' wax and ghee (clarified butter used in place of lard in cookery). If brass cases be used, this, and the pouring of a little of the same mixture when melted over the bullet, will render

the cartridge quite water-tight, but when paper cases are taken out, further precautions against damp are necessary. For some years I used an 8-bore rifle taking paper cases, and for its cartridges I found the following devices very useful. Firstly, I had a belt made with two leather cases (one to come on each side of the body when the belt was buckled on), each case consisting of four leather stalls lined with tin cylinders, of exactly the size into which an 8-bore cartridge will fit, a stout leather flap covering the whole, and buttoning below its top.

Secondly, for carrying spare ammunition, I had a magazine made on the principle of one of the above cases, with this difference, that tin boxes exactly holding six cartridges each, and so admitting of no rattling, took the place of the tin cylinders holding one cartridge apiece, but in lieu of four cylinders, the magazine had but three, and the tin covers of the boxes were also put on, and the leather flap buttoned over the latter.

I seldom put on the belt except when going up to an elephant; in which case, although I have seen the men behave remarkably well when I should not have expected it of them, I always preferred to feel independent of extraneous assistance, and to carry some cartridges on my person. I had been so nearly killed by an elephant when quite a beginner in big game shooting, owing to my companion and all the men running away, and taking with them my spare guns and ammunition, that I preferred to have some cartridges at hand

under my own control in subsequent encounters with that ponderous animal. A leather case, made to hold ten or a dozen express cartridges and fitting on to a belt, is also useful; and a tin cylinder in each stall will render the extraction of the cartridges all the easier, as well as serving as protection against a knock which might dent their contents if the stalls consisted of plain leather only.

For carrying luncheon, a most useful carrier is an invention of my own, viz., a stout leather bag with five divisions, each of which will hold either a quart bottle of cold tea, or two bottles of soda-water (the upper bottle being inverted), or a tumbler (two if required), and a packet of sandwiches. Thus, utilising one division for the tumblers and sandwiches, my bag will carry in addition either four quart bottles of cold tea, or eight bottles of soda-water. I have found this bag a most useful institution, whether out tiger, elephant, or bison shooting in the jungles, antelope shooting in the plains, or ibex shooting on the hills; while for snipe shooting in Mysore (but here it requires to be supplemented by a further store of fluid, for the thirst generated by snipe shooting is something to be remembered) it is also excellent. I preferred, however, when snipe shooting in the Madura district, to carry a box of ice, and to ice my soda-water bottles therein, as the sun in that part of India is very powerful.

I do not recommend re-capping of any cartridge cases used in big game shooting. One gets so

few shots (comparatively) that re-capping, with the possibility of a miss-fire, or a badly fitting, somewhat expanded case as the result, is in my opinion false economy.

In the low-country forests, the sportsmen may go in for whatever luxuries they may choose to carry, since carts are always obtainable through the revenue subordinates (provided that orders for their assistance have been sent by the head of the district), and all resolves itself into a question as to how much money the former may wish to expend on personal comforts. In any case, however, my counsel to all sportsmen going out into the jungles is *live as well as you can*, for, upon doing this, health in a great measure depends.

The liability of native servants to suffer from sickness in camp is a fertile source of extreme worry and inconvenience to their master. Of course, a servant, who is accustomed to the nightly attractions and dissipations of the bazaar, frequently feigns illness in order to be allowed to return to his low amusements—at any rate after the novelty of camp-life has worn off,—but in too many cases the illness is real, and it behoves the sportsman to do all he can to prevent his following from getting sick, as much for their sake as for his own. I used to try to get my camp servants to sleep on a mechān (or platform), erected specially for them inside their own tent and covered with grass; but, after having, at the cost of much trouble to myself, had the said mechān erected under my own personal supervision, I have found them sleeping on the

ground. Truly it is difficult to know how to save such people from the consequences of their own carelessness and apathy.

One great factor in the preservation of health in India is attention to the internal economy, and every servant should be warned, should the slightest symptoms of his requiring one occur, to at once come to his master and ask for a purgative.

In India almost every ailment, from whatever cause originating, appears to cause a rise in the temperature of the body; consequently, when a native "boy" comes up and says that he has "plenty bad fever," his master's first inquiry should be directed towards ascertaining whether he stands in need of the above-mentioned corrective, and if so, it should be administered in potent form (for natives require something *very moving*) at once.

Before starting on a jungle trip, every servant should be supplied with a suit of warm clothes and a blanket, and, in the rains, a waterproof cape and a waterproof turban cover should be given also.

I have tried—but I believe it to be useless to try—to induce them to boil their drinking water when in camp, and I don't suppose that other sportsmen are likely to succeed better than I have done in this particular. Of course they would *say* that they do so, if they knew that it would please their master to be told this.

If a servant should get seriously ill in camp,

his master must *personally see* that he is properly attended to, and fed with nourishing and suitable food. A very useful book on medical treatment in India is *Moore's Family Medicine*, by Sir William Moore, K.C.I.E.

CHAPTER VI.

THE WILD BUFFALO, THE YAK, AND THE TSINE

THE WILD BUFFALO (*Bubalus arni*)

THE wild buffalo stands about fifteen to sixteen hands in height at the shoulder, and is a massive, ponderous animal, with enormous horns, which are often longer in the case of the female than are the thicker trophies carried by the bull. The habitats in India of this animal are the Northern and Central Provinces, with part of Bengal. Buffaloes are not found in the wild state in Southern India, though, curiously enough, they reappear in Ceylon. In the Terai, Assam, and the Sunderbunds, wild buffalo are plentiful.

Except in size, dimensions of horns, activity and general appearance (in all of which respects the wild animal is much the superior), he resembles closely his tame congener, which, as a milk and butter producer, as well as for the purposes of ploughing and of draught, is so generally kept in a domesticated state all over India. Even the latter animals vary much with locality, the tame race in Assam, on the Neilgherry hills, and in Dharwar, showing a very marked superiority over the village buffalo of most parts of the country, the latter being but a miserable animal by comparison.

According to Rowland Ward, the record horns of the wild buffalo are a pair in the British Museum, each measuring 77⅜ inches in length, and 17⅞ in girth at the base. The sex of the animal which carried these magnificent trophies is not stated. A single bull's horn, also in the same museum and quoted by Ward, measures 77⅛ inches in length, its girth measurement being exactly the same as that of the former pair. General Kinloch says that the horns of the bull, measured from the tip of one across the forehead to the tip of the other, usually attain a length of about 8 feet, with a girth measurement of about 16 inches, those of the cow being usually longer, though slenderer. He states, however, that he has heard, on the best authority, of a pair of bull's horns measuring by the said method 12 feet 7 inches, and thick in proportion, and has also heard of a cow's head measuring 13 feet. He personally bagged a bull whose head measured 8 feet 3 inches. Lieutenant-Colonel R. Heber Percy, in the Badminton volume, considers about 8 feet in length, and 16 inches in girth at the base, the average measurements of a good bull's head.

The wild buffalo is certainly a cranky, bad-tempered and "three-cornered" brute (his tame congeners in Assam and on the Nilgiri hills are just the same), and he is as obstinate as a mule. He is liable to attack without provocation, though instances of such action on his part are comparatively infrequent. When wounded, however, a wild buffalo is a very savage and dangerous

antagonist, as Captain Baldwin, the author of *The Large and Small Game of Bengal*, found to his cost, since he underwent a severe pommelling by a bull which he had hit.

Although I have never bagged a specimen, the wild buffalo was one of the first beasts at which I fired after my arrival in India in the days of my youth.

Close to the tea estate in Assam on which I was then residing, lay a large expanse of open swamp and rice land, beyond which stretched a vast tract of high reeds and grass, forming a very dense, as well as high jungle. From the latter, a wild bull buffalo used to visit and appropriate the herd of tame females, which, in the season when there was no rice cultivation, were accustomed to graze in the swamp and in the area devoted to that cereal. Upon many occasions I attempted to shoot this bull, but as I had to plunge through water up to my knees, and as, moreover, the ground on which the herd was usually found was quite open and destitute of all cover, the animal would always move off before I could approach near enough to put an 8-bore bullet into him, and long shots at the bull, with this most unsuitable weapon for long-range work, only resulted in misses. One day, however, I came close upon the herd, which was upon this occasion grazing where there was some cover, and a bull, which I took to be the wild one, dashed past me alarmed at my presence, receiving as he passed a 2-ounce bullet; but this animal unfortunately proved to

be a tame one! My bullet had (luckily for me) drilled a hole right through him too high for the vitals, and too low to injure the spine, so the injury being but a temporary one, the compensation which I had to pay was far more moderate than it would have been had I killed the bull.

One evening, when out with a 12-bore rifle, while on the same estate, I visited a narrow open in dense reed and grass jungle, in the hope of finding wild pigs feeding there (I had, when out with a shot-gun, previously seen a sounder of pig in that spot). In place of pigs, I found a herd of buffalo. I could not be sure whether they were wild or tame animals, so to settle the point I showed myself, and they stampeded, one big beast pulling up at the edge of the jungle and turning round to look. My shot at it was, however, ineffectual, and it disappeared in the dense, high reeds.

Another evening I visited the same spot, this time taking my 8-bore rifle. It was devoid of game, but further on in the jungle was a pond, and on proceeding to look at this, I found a single buffalo grazing at its edge. I made a careful stalk in, and gave the bull both barrels. He rushed into a dense patch of high reed and grass, and I could hear him snorting and blowing inside—evidently very sick—but as it was getting dusk, I was obliged to leave him to his own devices. Next morning I went to look for him, and found him in the same place. He jumped up close to me and went off, but in such jungle a man on

foot was quite helpless. I foolishly followed him up for some distance, but did not see him again —probably luckily for myself, for the only sight of him which I could well have obtained would have been that of his head, at very close quarters, had he charged me!

I then procured an elephant, and tried to obtain a view of the bull from its back, but found it hopeless. So high were the reeds, that the cover was often above my head as I sat on my lofty perch, and we failed to track him up. A few days later I heard that the bull had been found dead, *and* that he had a ring in his nose. It appeared that he was once tame, but had become quite wild (very possibly his father was a wild bull).

Some Assamese came up to my bungalow stating that I had shot their bull, and demanding compensation, adding by way of proof that they had found the cartridge cases. My reply was, I fear, not very polite, and they went off, but did not attempt to enforce their claim in a court of law. The fact was that the bull had reverted to a state of nature, and was quite beyond human control.

It will be seen from the above that consistent bad luck was my portion when attempting to shoot wild buffaloes in Assam, but I had not even one of the three requisites—viz., money, time, and elephants—for sport in those jungles, a man on foot having no chance there. It is often very difficult to distinguish wild from tame animals in jungles to which both have access, the latter being in Assam fine large beasts, and very often, as above

indicated, themselves the offspring of wild bulls. I heard of a heavy bill which the then Deputy Commissioner and the Superintendent of Police at Dibrugarh once had to pay. They were shooting from elephants near Sudiya on the frontier, and getting amongst a herd of buffalo had capital sport with them. The animals proved however to be tame ones, and the sportsmen were obliged to recompense the owners of the slain.

My advice to beginners under "the Great Indian Rhinoceros," applies with equal force to buffalo shooting in Assam.

Wild buffaloes possess very great vitality, and will stand much lead if the latter be not very accurately placed. The late Mr. Sanderson, a long time subsequent to the publication of his book, wrote to me just after he had returned from an expedition undertaken mainly in search of this game, telling me that he had lost half the "buffs" which he had wounded, though some of them were upon three legs, and in spite of the powerful weapon (an 8-bore with a powder charge of twelve drachms) which he used in that trip.

The vernacular names for the buffalo are—

Hindustani—Arna (male), Arni (female), Jungli Bhains and Bhains.

In Bhagulpore—Mung.

Gondi—Gera-erumi.

THE YAK (*Poephagus grunniens*)

This animal, which is a native of Thibet, is but rarely shot by English sportsmen. The reason for this is the extreme jealousy of the Thibetan Government, whose Tartars turn back any Englishmen who may try to cross the frontier into those inhospitable regions.

General Kinloch relates how he tried unsuccessfully upon several occasions to bag a bull yak, and that it was not until his fifth visit to the ground that he at last succeeded. Cows are not unfrequently found in the Chung Chemno valley, and very occasionally a sportsman (who is highly favoured by fortune) has had the good luck to find and to bag a bull there.

Many devices have been employed by ardent sportsmen to get past the cordon of Tartars on the Thibetan frontier, but it is very seldom that any have succeeded.

Colonel W. (of the 43rd O.L.I.) succeeded in bagging a bull in his first trip to yak ground, but if my memory rightly serves me, he managed to cross the frontier and to bag one bull before he was discovered and turned back.

According to General Kinloch, anyone who might succeed in eluding the Tartars, and in reaching the mountains to the north of the Sutlej, would have a good chance, but he also points out how very difficult it would be to effect this.

He states that the height of a wild bull yak is

fifteen hands or more, the horns measuring up to 3 feet in length, with a base circumference of 14 inches. Rowland Ward, in his *Horn Measurements*, gives the length of a pair of horns in the British Museum as 38½ inches and their girth as 19 inches.

Great care has to be exercised in stalking yak, as their sense of smell is most acute, though Kinloch does not consider them very sharp-sighted animals. Colonel Ward, writing in 1883, suggests as localities the Kobrang (or Kugrang), and the Keipsang, which is about eight miles from Kyam.

Both he and Kinloch agree that there is good ground beyond the Lingzinthung plains, which themselves lie beyond Chung Chemno, but special arrangements would be necessary in order to reach the locality, on account of the entire absence of both fuel and fodder for some six or seven marches.

The vernacular names for the yak are—

Thibetan—Dong, Yak, Soora-goy, Bubul, Brong-dong.

Hindustani—Bun-Chowr.

THE TSINE (*Gavæus sondaicus*)

The tsine, or Burmese wild ox, is found in Burmah, and is therefore included amongst Indian animals. He also inhabits the Malayan peninsula, Sumatra, Borneo, and Java.

The tsine differs widely from the Indian bison in many respects.

In colour, the cows and immature bulls are bright chestnut, and the old bulls black, with a white patch on each buttock.

In size, the tsine is much inferior to the gaur, and he lacks both the dorsal ridge and the frontal crest of bone appertaining to the latter. His horns are very small, the largest quoted in Rowland Ward's *Horn Measurements* being only 24¾ inches in length, and 12¼ inches in girth. He, like the gaur, is devoid of a dewlap.

In Burmah this animal is, I believe, shot either from elephants, or by beating a large stretch of jungle with a number of men, and he is said to be more pugnaciously inclined when wounded than is the gaur.

The vernacular name for this animal is—

Burmese—Tsoing.

NOTE.—For an article dealing at length with this animal, see appendix.

CHAPTER VII.

THE TIGER (*FELIS TIGRIS*)

DESPITE the facts that so many English people have relations and friends earning their living in India, and that so many Englishmen of means now visit that country, it is surprising to find how great is the ignorance which prevails at home regarding the big striped cat who is the subject of this chapter.

English people are wont to believe that tigers are common in India, and that a man has only to be keen on shooting, and to desire interviews with these interesting felines, in order to obtain plenty of skins.

As a matter of fact, however, the truth is (alas!) exactly the reverse, and every sportsman has ascertained the falsity of the pleasing fiction so soon after his arrival in India as his circumstances may have rendered it possible for him to go out tiger shooting. Many keen sportsmen have been out in India for a number of years, have spent a good deal of both time and money in trying to bag tigers, but have not succeeded in slaying even one.

The fact is that tigers are necessarily rare

animals, for they prey ordinarily upon other *feræ naturæ*, and it follows from this that were they to become plentiful in any one locality, the game would be killed off and the tigers forced to migrate. The ultimate result would undoubtedly be that the tiger would become extinct. Nature, however, maintains so even a balance that this danger has been completely guarded against; and, although the eventual extinction of the tiger is probable, there are so many vast solitudes but rarely inhabited by man in the immense continent of India that, although he is an uncommon beast, his extermination is still very far off.

But for the havoc wrought by man amongst the wild animals upon which the tiger preys, there would no doubt be food for more of the latter; but the fact being that the country bristles with guns in the hands of natives who shoot only for the pot, and who spare neither females nor young, and as moreover there are so many meat-eating castes that shooting venison for sale is a profitable business, deer, etc., will soon be exterminated in forested areas near villages; and the tiger, his food supply being cut off, will be forced to seek haunts more remote from the borders of civilisation, where game may still exist.

Unfortunately, a reward, which is in Mysore as high as fifty rupees, is paid for the destruction of each tiger. Now when we reflect that a forest guard in Mysore draws pay at the rate of only six rupees per mensem in most localities, we can well imagine how profitable a business it must be

for a man of his class to shoot deer, etc., for the purpose of sale, and to occasionally shoot a tiger for the sake of the reward.

This, then, is another reason why tigers are even rarer than Nature requires them to be, for, owing to the scarcity of the tiger's natural food which is fast being exterminated by native gunners, the former are compelled to take toll of the villagers' cattle, and then comes the chance of the native, who, lying *perdu* in perfect safety in a tree, watches for the return of the slayer to feed upon his victim. Should the tiger so return, he is either killed, wounded, or missed, and seriously scared by the would-be bagger of so many rupees! I have, however, heard of a case in which the ambushed native was so struck by the imposing appearance of the animal, to shoot which he was watching, that he was too scared to fire at all, and the tiger ate the carcass before the eyes of the man, who remained all night in the tree, afraid to descend!

If Government were to abolish the reward, natives would no longer have any interest in shooting tigers, except, of course, any such as might become great oppressors of any one village, in which latter event the beasts would get very short shrift. In my opinion the time has come when the reward *ought to be abolished*, for, while tigers are so rare, guns are so very common, that there is no fear of any community, which might suffer heavily from the rapacity of a tiger, failing to take steps to rid itself of him.

Tigers are great travellers, and each one wanders over a very large tract of country, not killing cattle often near to any one village, but taking one here and one there, frequently in places at long distances apart.

How many animals a tiger accounts for in the course of a single year, I cannot say; but I should imagine that, including deer and pig (and an occasional cow or goat, if he be partially a cattle-killer), the number would not fall short of one hundred.

In the big forest tracts and hill ranges, are many tigers which confine themselves almost entirely to killing game; but, beyond the sight of their big pugs made after rain in the soft ground, the sportsman has no evidence of their existence, and no chance of bagging them unless he should, by good luck—which has happened to a few men within my own knowledge—chance by accident upon one of them when looking for meaner game, and slay him on the spot.

On the hills, where open, grass expanses alternate with cover, and where animals are far more visible than they are in the jungles, a tiger can occasionally be stalked and shot when he is himself hunting on his own account. When, however, the jungles have dried up after the monsoon, the ground has been thickly strewn with fallen leaves, and walking noiselessly is a matter of great difficulty, if not of impossibility, the tiger finds game very hard to stalk; and during this season I believe that some tigers, which usually live almost

exclusively upon game, take to cattle killing. Others, again, seem to prey chiefly upon cattle, but the careers of such are usually cut short ere they have enjoyed an almost exclusive diet of beef for any lengthened period.

Man-eating tigers are nowadays extremely rare. During many years spent in Mysore, I can personally vouch for only one isolated instance, and this a curious one, for, though the tiger was not killed, and though I remained in the district for some months after the first—and, so far as I know for certain, the only—murder of a human being committed by the beast, he appeared to be satisfied with the one experiment.

As a rule, a tiger which has tasted human flesh, and has found how very easy a victim the formerly dreaded *man* is, continues man-killing—combined, of course, with cattle, and possibly at a pinch even game-eating—and becomes a terrible scourge to the villagers whose daily work takes them into the jungles frequented by him. In the case mentioned above, the tiger killed a herd-boy, who, with another youngster, was driving the cattle home in the evening. The latter, frightened nearly out of his senses, when upon hearing a shout of "Brother! brother!" he turned, and saw the tiger holding his victim in his mouth, fled incontinently to the village—as also did the cattle. Next day the villagers went out in force to the scene of the murder, and there they found the boy's black blanket, his shank bones, one arm bone, and the skull with the flesh of the face eaten off it.

I received the news upon the third day, and at once went to the spot. The police inquiry had been held, and the remains removed before I arrived. On my way to the scene of the tragedy I saw the deeply imprinted pugs of the tiger leading all down the path towards the village for a long distance, there having been heavy rain during the night succeeding the kill. At the spot itself, there was little to be seen beyond the said pugs leading down the road, and a few small pieces of bone ; but upon further search, I found what the police and villagers had failed to find, viz., the entrails of the boy collected in a little heap, and footprints close by showing where the tiger had lain down in the jungle to eat his victim, within thirty yards or so of the path. I tried some fruitless beats for this tiger, but he had moved off, and I failed to encounter him.

Recently, while on the Travancore hills, I heard of no less than two man-eaters in different, though far distant parts of that large extent of country. No doubt those tigers were driven to man-eating owing to the terrible destruction of game in those hills by natives, and the consequent scarcity of their natural food.

I have, however, in the whole of Southern India, never heard of a man-eater of such calibre as a small tigress shot many years ago by my godfather, the late Mr. Æneas Mackintosh, who resided at that time in Purneah. This beast had been man-eating for about a year, and during this period she had, it was computed, killed no less

than ninety human beings. She had lost all fear of man, and used to break into natives' huts, and seize and carry off her victims. Several villages had been deserted owing to the terror inspired by this feline fiend, and great were the rejoicings of the villagers when Mr. Mackintosh—a man who was at the death of between two and three hundred tigers during his time in India—brought her in dead, and safely padded on his elephant. Women held up children to let them see the murderess, telling them to look at the brute who had killed their father, brother, or other relative, as the case might be, and it is easy to imagine what a revulsion of feeling her death must have caused — security, and freedom from fear, succeeding constant danger and extreme terror.

There is no animal in India so dangerous and awe-inspiring as is a man-eating tiger. From what I have heard and read, the man-eater is even a greater traveller than the cattle-killer, and his beat is usually a very extensive one. Over the whole of the area ranged by the tiger, no villager can possibly feel safe at any time when he has occasion to enter the jungles. The man-eater may be even then watching him, or it may be twenty miles off watching for a wood-cutter or cowherd there. Once the victim has been selected, there is ordinarily no possible escape. A stealthy crawl to within a few yards' distance, one rush and a spring, one yell from the unfortunate who has been seized, and all is over, and the murderer retreats with his prey to some thicket, there to make his horrible meal at his leisure.

Should an armed man meet a man-eating tiger by chance in the jungle, and see the latter before the beast could seize him unawares, the former would incur no more danger in firing at the animal than he would in the case of any other tiger. Further, if an *unarmed* man were suddenly to come face to face with a man-eater, and to present a bold front to the latter—more particularly if he were to pretend to act on the offensive—I believe that the animal would retreat without daring to molest him.

A tiger is nothing but a huge cat, and most of his motions and habits are those of the latter. Just as a cat lies in wait for prey, so does a tiger—man-eater, cattle-lifter, or game-killer; just as a cat stealthily stalks his victim, taking advantage of every little bit of cover and means of concealment, so does its huge counterpart in the Indian jungles. There is nothing open in the attack of either till the victim is within one second's seizing distance, and there is then no need for any further concealment. A man so stalked has no chance whatsoever, and a rifle, however powerful, in his hands would avail him nothing.

Fortunately man-eaters are nowadays seldom permitted to live long enough to be able to claim a very long list of victims, and I should consider no means unsportsmanlike in endeavouring to compass the destruction of so terrible a scourge.

Amongst the causes which lead tigers to take to man-eating I believe the following to be the chief:—

1. Old age and failing powers, rendering the killing of cattle and buffaloes a matter of some difficulty, or at least an operation necessitating considerable exertion.

2. Hunger, the result of the foregoing, emboldening the tiger to acts of daring which eventually lead to a conflict with *man*, upon which the former, finding how weak a creature the latter really is, loses fear of him, and often kills human beings in preference to attacking animals which are far more difficult to overcome.

3. Hunger, in the case of a tigress with cubs dependent upon her, when game is scarce or hard to approach owing to the season, leading to the same result as that supposed in 2.

4. A wound, or wounds, causing the same conditions as those suggested in 1 and 2.

In theory it would appear to be a very easy and natural transition from game to cattle, and from cattle to man, and yet, as has already been stated, man-eaters are very rare as a matter of fact, while many tigers live exclusively upon game.

We can well imagine a young animal in the prime of life, who is ordinarily able to make a decent living by stalking, and by lying in wait for game near water or near a salt-lick, being driven by stress of circumstances to kill cattle; and probably the reason why so few of such take later on in life to man-eating, is due to the fact that so many tigers are killed pretty soon after they have commenced business in the beef line that comparatively few of them live to attain old age.

When the late Mr. Sanderson wrote his admirable book, many years ago, conditions were very different. Game was more abundant, guns were comparatively few in the villages, and what few there were in his vicinity Mr. Sanderson succeeded in getting impounded, by moving Government so to direct in the interests of Kheddah operations. If he could now revisit some of his old haunts, he might form an opinion widely different to that which he held *then* on the subject of the possibility of the ryots, without aid from tigers, being able to keep down game injurious to crops. With this one reservation, I accept and endorse his views as to the utility of tigers, and I sincerely hope that the great cat may long survive in the land.

The activity of the tiger, combined with his tremendous power, his acute senses, and his extreme cunning, render him by far the most dangerous animal which can be met with in hostile encounter in the continent of India.

Nearly every year several sportsmen are killed when tiger shooting, and it is almost surprising that the list of victims is not even longer.

Periodically, the question as to the length of tigers comes up for discussion; a lot of more or less inaccurate correspondence ensues, and the matter is once more allowed to drop until some startling measurement is reported, when it is again revived with a similar result.

I was not long ago told by an acquaintance that a certain good sportsman, who has shot many tigers and who lived near my informant's house, had shot

a very large tiger; a few questions, however, elicited the fact that the measurement of length quoted had been taken from the skin!

There is not even a universal method of measuring tigers and panthers in vogue amongst all sportsmen, as is highly desirable.

Personally, I have always treated mine by the method which is the only reliable one, and which gives the *smallest possible* measurement. I lay the animal on its side, and pull it out as straight as possible. I then put a stick in the ground at the tip of the nose, and another at the end of the tail, and measure the distance between the sticks clear of the body.

Thus dealt with, my largest tiger taped 9 feet 2 inches, and my largest tigress 8 feet 4 inches, respectively in length.

The ordinary mode of measurement, viz., running the tape along the body following the curves—however strictly carried out—gives a considerably larger result in the case of the same animal than is obtained by the method employed by me.

The length of the tail varies somewhat in different animals of otherwise similar dimensions, and though weighment would be the best means of comparison, it is seldom practicable. It is quite possible that in Bengal tigers may grow to a larger size than they do in Southern India, but so unsatisfactory is the evidence, and so diverse are the methods of measurement, that although I can well believe that a giant amongst them might occasionally attain a measurement of ten feet by the method

employed by me, I do not believe that any tiger so measured would much exceed that length.

On a friend, who was out with me when I shot the tigress of 8 feet 4 inches, telling me that he had always measured his tigers in the ordinary way, viz., by running the tape along the body, out of curiosity I measured her in that way also, when her measurement became 8 feet 7 inches. Probably my 9 feet 2 inch tiger thus measured would have taped at least 9 feet 6 inches.

Sanderson says, "My own experience can only produce a tiger of 9 feet 6 inches and a tigress of 8 feet 4 inches as my largest," but most unfortunately he omits to mention the method adopted in measuring these, and as the ordinary sportsman's measurement is that along the body following the curves, I think it probable that Sanderson measured his tigers in this way.

The principal vernacular names for the tiger are the following :—

Hindustani—Bagh, Sher.
Canarese—Hooly.
Bengali—Sela-vagh, Go-vagh.
Mahratti—Wuhag.
In Bundelkund and Central India—Nahar.
In Bhogulpore (hill people of)—Tut.
In Gorukpore—Nongya-chor.
Tamil—Puli.
Telegu—Puli and Pedda-pulli.
In Malabar—Parain-pulli.
In Thibet—Tagh.
In Lepcha—Suhtong.
In Bhotia—Tukh.

CHAPTER VIII.

TIGER SHOOTING IN SOUTHERN INDIA AND HINTS TO BEGINNERS

EVERYONE fond of big game shooting is very keen to bag a tiger whenever the opportunity may offer, and the rarity of the animal only enhances the sportsman's anxiety to succeed in each attempt.

As a matter of fact, however, considered as a form of *sport*, tiger shooting cannot be compared with bison and elephant shooting, or with sambur and ibex stalking on the hills. The reason for this is that the sportsman's own part in it is so very small a one, by reason of the number of accessories —it may be elephants as in Bengal, or beaters as in Southern India—which are required, and without which, unless he should happen—a very rare piece of good fortune indeed—to meet with one accidentally when stalking in the jungle or on the hills, or to successfully sit over a kill, he has no chance whatever of bagging a tiger.

Of howdah-shooting from elephants, as practised in the expanses of reed and high grass in Bengal, Nepaul, and Assam, I have had no personal experience, though my father (who was in the Bengal

Civil Service, and had great opportunities for the sport) did much tiger shooting by this method.

In Southern India, the sportsman is usually posted on a rock, tree, or shooting ladder, and a crowd of natives—some of them employing horns and tom-toms (native drums)—endeavour to beat the tiger up to him.

This method is often, somewhat erroneously, termed "tiger shooting on foot," though, if the tiger should go on wounded after the shot, he must be followed up on foot; and this operation is the most dangerous one which the Indian sportsman is ever called upon to perform.

Another method by which a tiger may be shot is by watching for his return to feed upon the carcass of a buffalo or a cow which he has killed; and, unless it be adopted under certain circumstances, *e.g.*, when a tiger has killed in a large tract of forest in which beating would be out of the question, a chance (a poor one though it be) is sacrificed.

TIGER SHOOTING WITH BEATERS

Wherever the jungles are not too large and continuous, this method is the one which is most frequently successful. A great deal depends upon the cover in which the tiger is supposed to be lying up after a heavy meal of beef. If this be of considerable extent, and especially if intersected with ravines, some of which diverge laterally from the main longitudinal nullah, in the absence of men well accustomed to the work, and of a large con-

tingent to act as stops, the odds against bagging the beast are heavy.

If, on the other hand, there should be but one ravine, or a stream of water flowing through the cover, and the latter be of reasonable dimensions, the chance is a good one.

The first thing that a tiger does after eating a heavy meal is to make for the nearest water, to walk right into it, and to drink deeply. He then, unless he should feel inclined for a second feed, betakes himself to the nearest suitable cover where he can obtain cool shade, and from which water is not far distant.

He has generally eaten both hind-quarters of his victim during the first night, and he intends, after sleeping off the effects of his heavy gorge, to return to the kill, and to devour the remainder of the flesh on the succeeding night.

Bearing the above points in view, and with the remark that the hot weather, *i.e.*, from February to May, is *the* best time for the sport, we will now discuss the *modus operandi* of, say, three or four guns, who may have decided to form a party to shoot tigers in any given district.

It is essential that three or four natives belonging to the district, who are keen upon securing success (or, at least, upon earning rupees as a reward in the event of good sport) should be engaged as shikarries. These men must know the country and the people thoroughly well, be active and willing, and also ready to carry out all orders *promptly, and to the letter.*

It is further essential that unless one at least of the party be a Government official belonging to the district to be worked, the sportsmen should invoke the assistance of the authorities by writing a polite note to the Collector (or calling upon him, should that be practicable), and asking him to kindly issue orders to his subordinates for their assistance. (In Mysore, and in non-regulation provinces in India, the head of each district is called, not "Collector," but "Deputy-commissioner.")

Without the assistance of the authorities, it is in many places well-nigh impossible to induce villagers to turn out to beat, and in fact in too many localities, owing, in the first place, to the extreme general leniency of Government towards the natives, and in the second, to a too often rabid and scurrilous native press (recently however somewhat brought under the curb), the natives appear to take the keenest delight in thwarting and obstructing an Englishman in every possible respect. The party must, therefore, in the first instance, and in ample time, invoke the assistance of the authorities, and should their request for the same be met with even a churlish and half-hearted acquiescence, they had better decide to leave that locality alone and to try another. In many districts it is necessary to obtain a licence from the Collector to shoot in forest reserves, and, during the hot and dry weather, this is often refused in the interests of forest fire-protection —*verb. sap. sat.*

Supposing, however, that all has gone well, and that the Collector, or Deputy-commissioner, as the

case may be, has issued the necessary orders to his subordinates, the next matter to be settled is the plan of campaign.

It is at this stage, and not until now, that the local native shikarries before alluded to should be engaged, and in consultation with them the sportsmen will decide upon the best locality for their first camp.

It is presumed that each member of the party has brought at least one horse or pony, and that the one who is in charge of their commissariat has provided all camp requisites, as well as a sufficient supply of provisions, liquor, and soda-water, to last them for the trip; or that it has been arranged that consignments of the three latter shall meet them from time to time at pre-arranged places.

The spot to be selected for the first camp should, if possible, be a central one, with jungles frequented by tigers within easy reach on all sides, and it must be close to good water, and sheltered from high winds.

Till the early showers fall, generally in April, there is little fear of malaria, but, after any spring rain has fallen, the sportsmen should be very careful never to camp in a feverish locality. In all places where carts can go, there is no need to sacrifice comfort to lightness of equipment, and I shall, therefore, recommend one 12 or 14 feet square hill tent for each two members of the party to serve as their bedroom, and a similar, or a still larger tent (according to their number) as the common dining-room and sitting-room, also camp furniture sufficient

for comfort. Rowties too should be taken for the use of the servants, but it is unnecessary in dry weather to take tents for the horses, since shelters, efficient except in rain, can be made of bamboo, with boughs or grass for roofing and sides, to protect the animals from dew and wind.

It is essential to arrange for the purchase of some cattle or buffaloes as baits for tigers, and this is no longer so easy a matter in Mysore as it appears to have been—at least, in the vicinity of Mr. Sanderson's house at Morlay—when he wrote his book, over twenty years ago. I could seldom procure baits for less than some five or six rupees each in Mysore, and often very much more was demanded for them.

A good plan, if there be plenty of time, is to find out when auction sales of stray, unclaimed cattle are to be held in the different taluqs, and to instruct someone to buy the required number, but this is more practicable for a man resident in the district than for a shooting party consisting of strangers. Anyway, at least six or eight cattle or buffaloes must be provided, and when any one of them is killed, another should at once be purchased in its place.

Tying up the baits must be done regularly and systematically by the shikarries, assisted, of course, by the requisite number of coolies engaged for the purpose. This will necessarily vary with the number of animals, and the distances apart at which they are to be tied. Great judgment must be exercised in tying up, for the objects in view

are, firstly, to tie the bait where a tiger is likely to come across and to kill it; and secondly, to tie it where, in such event, he will probably lie up within a reasonable distance, in a place moreover whence he can be beaten up to the guns with a fair chance of success.

Bearing in mind then that water and shade are the tiger's main requirements when he lies up for the day, and remembering also that a ravine, or the bed of a stream is useful, since he is very fond of following its course, usually upon one or other of its banks, the baits should be tied every evening, and in the morning should be let loose, fed, and watered till the next evening. Generally a cow or a bullock is tied by a rope round the base of the horns, and a buffalo by one fore-leg. Of course the greater the number of the animals which can be tied as baits, the better the chance of one of them being seen and killed by the tiger.

In the event of the baits being tied near to the camp, it is a good plan for one or more of the guns to go round the tied cattle very early each morning, but not more than one sportsman and one attendant with a spare gun should go together, as the advance must be stealthy and noiseless in the extreme. It is just possible that the tiger may have just killed one of the baits, and be found even then in the act of feeding upon the carcass, in which event he may be shot at once. When it is necessary to tie up at any considerable distance from camp, arrangements must be made so that, in case of a kill, information of the same will reach

the party as rapidly as possible; while the shikarrie, who has been stationed in some village near the spot to look after the tying, should at once proceed to turn out a sufficient number of beaters, and to keep them collected ready for work. Once the villagers have gone to their fields, any attempt to collect men enough for a drive would be hopeless. As soon as the sportsmen receive the information, they should start to ride to the spot. This they will probably have to do at a walking pace, as a native guide must show them the way; and they should moreover cause all necessaries for the day to be taken with them, *and not permit the carriers of the same to lag behind.*

And here it is necessary for me to digress a little in order to describe that most excellent adjunct to tiger shooting, as prosecuted in the south of India, viz., the "shooting-ladder." This is made of bamboo, two stout canes, as straight as possible, forming the sides, the rungs being made of split pieces of the same, through each extremity of which, outside the holes made in the big bamboos to receive them, a peg is thrust to keep all firm.

About sixteen feet is a good length for a shooting-ladder; and at a distance of, say, five feet from its top, a wooden seat, in place of a rung, is let in, and is fixed at such an angle that, when the ladder is placed leaning against a tree, the seat becomes parallel with the ground, and therefore flat and comfortable to sit upon.

The top rung should be about one foot from the end of the ladder, and should be made extra strong.

Comfort is everything when combined with efficiency, and, considering that a tiger beat is often of considerable duration, and that the sportsman will find, if he places his ladder at too acute an angle with the tree against which it rests, the rung next above his seat will catch him in the small of the back, thus rendering shooting very difficult, and personal ease out of the question, he will of course place it at a somewhat obtuse angle, comfortable for himself. If the seat be too near to the top of the ladder, the sportsman's back will similarly be brought against the tree, or at an uncomfortable angle against a higher rung, and he will be bent forward in a most miserable position.

Having placed the ladder so that the sportsman faces about half-left to the direction of the beat, or at any rate to that of the tiger's probable point of exit, its top should be firmly lashed to the tree by a rope—more to prevent the possibility of a wounded beast making a blind rush in the direction of the danger, and so unintentionally upsetting both the ladder and its occupant, than from any fear of an attack by the animal after the shot.

Even in the former event, the tiger would probably be too startled to take advantage of his opportunity, but the sportsman might be very seriously injured by his fall.

I regard the ladder as an indispensable adjunct to this mode of shooting tigers. It is light, being easily carried by two men; can be noiselessly put up, and is equally effectual whether a tree, a

bamboo clump, or a thick bush, be selected as its prop.

Directly one beat is over, the ladders can be carried on to the next one, and be there quietly placed in position.

Where rocks are available as posts of observation during a beat, ladders are unnecessary, and the former are even preferable to the latter, since upon them the sportsmen can turn in any direction they please, whereas only about two-thirds of a circle can, in the case of a ladder, be covered by each rifle.

I have seen very few trees in which, without the aid of a ladder, I could sit with any comfort, and many tigers have escaped from other sportsmen entirely on account of the latter being in so constrained a position that they either could not fire at all, or, getting only very awkward shots, missed.

I have never seen the cushions for slinging in trees, described by Colonel R. Heber Percy, in the Badminton Library, as in general use by that most sporting regiment, the Central India Horse, but I should imagine that their instability, their liability to rock when wind is blowing, and their comparatively limited sphere of utility (they could not, I take it, be employed where a lofty perpendicular trunk, a bamboo clump, or a bush, would afford support for a ladder) would render them less serviceable. The portability of the cushion would appear to be its only advantage, and I question the danger of an extra native accom-

panying the sportsman to his post. Natives with their bare feet walk very noiselessly, and the ladders are never posted very near to where it is probable that the tiger is lying.

After this digression I will now return to the shooting party.

I will suppose that they have a ladder each ready in camp to take with them as soon as news of a kill is brought in, and also one or two spare ones in case of accidents.

The local native shikarrie, if he be worthy of the name, will, upon finding that a bait has been killed, by seeing the direction in which the tiger has moved off from the kill, and in consultation with the villagers, often be able to form a fair idea as to where the beast is probably lying up, and the direction which he will, when alarmed, prefer to take. Much depends upon the latter, for if an attempt be made to drive him in a direction in which he is unwilling to go, he will, almost to a certainty, either break back through the beaters, or outflank them altogether, and so escape at one of the sides.

To prevent the latter, if men sufficient can be raised (frequently they cannot), lateral lines of stops may be posted up trees, but they are not unlikely to do more harm than good, since it falls to the lot of very few sportsmen to live long enough in any one place to be able to train men sufficiently to render them reliable assistants in tiger shooting. Still in many cases it is absolutely necessary to employ stops and to run this risk.

The somewhat cumbrous method of placing lines of string, with bunches of feathers or pieces of cloth attached at intervals about three feet from the ground, along the sides of the beat, is open to the objection that the men putting them up are liable to disturb the tiger, who, if he should suspect danger, will probably break back through the beaters as soon as the latter advance. Of course the posting of stops is open to the same objection, since the tiger may get their wind, and, considering as he does, that noise under such circumstances is less dangerous than a silent foe ahead, he may similarly break back and be lost.

If, however, there are cross ravines running at right angles to the direction of the beat, it will be necessary to post stops to guard them. They must be strictly warned not to speak, whether they should see the tiger or no; but each one, taking with him some pieces of dry stick, must climb a tree, and, should the tiger try to sneak out of the beat near him, the breaking of one of these as the animal approaches, will cause the latter to turn.

The sportsmen with their ladders, etc., should then go as quietly as possible to their posts, taking care that the tiger does not get their wind, the beaters having been halted meanwhile in a place too far from the cover for any danger of their disturbing the game by talking, but they must also be kept as quiet as possible by the shikarries. The best plan of allotting positions is to draw straws for the posts before each beat. Of course

the sportsmen must not be posted so that the wind blows from them towards the beaters and the anticipated line of advance of the tiger.

One caution I must give here regarding the tricks often played by the beaters in tiger shooting. Too many of them try to scamp their work, and when his post happens to be one from which he can see their advance from some distance off—*e.g.*, on a rocky hill or some such post of vantage—the sportsman will observe that in place of coming on in line, they will shirk all the thick places, and will follow one another in a string along any paths or opens. This is very difficult to avoid, and all that can be done to prevent it is to warn the beaters that any such conduct may cause the tiger to go back and so escape, to promise them a reward in the event of success, and to distribute amongst them, at intervals in the line, any trustworthy men who may be in the sportsman's employ, to keep them as much as possible in their places.

Another favourite trick is for men to join the beaters before pay-time in the evening, and, though they have done no work (or next to none) to claim pay for the whole day. To prevent this, I used to muster the beaters in line before sending them to begin the day's work, and I gave each of them a small piece of paper with my own initials in autograph written upon it. After the last beat, I again caused them to form line, took back all the vouchers (which I then destroyed), and paid, according to the number collected, at the rate of four annas (about fourpence) per man. Small

change is often a difficulty when in camp, and if a rupee be given to every fourth man in the line, the necessity for carrying a quantity of small silver is obviated. Gun wads are often employed for this purpose, but the natives are becoming too cunning for so simple a check.

After the sportsmen have been settled, the ladder-carriers may be either sent back to join the beaters, or be utilised as stops; but in either case they must be impressed with the necessity for absolute silence, and a trustworthy man should, moreover, accompany them, not only to prevent their making any noise, but also their going where they might give their wind to the tiger, should he be lying in the expected position.

All being ready, the beat will begin, and now, except to make a straight shot should the chance offer, the sportsmen are helpless, and, apart from luck, success depends entirely upon the beaters. The beat should not be begun too near to the expected position of the tiger, nor the guns be posted where there is a large open; otherwise the animal, should he come to its edge, will probably gallop across it, and so afford only a risky and difficult shot. At the same time, it is essential that the undergrowth round the posts must not be so dense as to rob either of the guns of a chance of making a good shot, should the tiger approach his position. The "golden mean" is the safest guide.

When the tiger is viewed, the nearest gun should let him come as close as possible, and then, when he is nearly level with the line of posts, and if he

is broadside on, shoot him through the shoulder-blade, or, if he be turned slightly away from the sportsman, then just behind the shoulder, taking care not to hit him too far back, and rapidly following up his first shot with a second, whether the tiger appears to require it or no. If, however, he has no spare gun on the ladder, it is advisable to reload the discharged barrel before firing a second shot, so as not to be left with an empty rifle in the event of the tiger discovering his position, and attempting an escalade. Instances of the latter are not common, still it is as well to be prepared for all contingencies. Only within the last few years, an officer in the Gunners, when out shooting in the Deccan, broke the shoulder of a tigress, who at once rushed at his tree with the intention of trying to get up it (although her broken shoulder would have made it impossible for her to succeed), whereupon he killed her.

Years ago, in the days of muzzle-loaders, Colonel G.—a fine Mysore sportsman—was on a shooting ladder, with a double-barrelled rifle in hand, and a second gun at the foot of the tree. A tiger which had been beaten up to him and severely wounded with both barrels by the Colonel, catching sight of his foe, and being too sick to do any more, lolled up on the ladder, with all the will, but lacking the physical ability to exact a deep revenge. So badly injured was the animal in this case, that, after reclining helplessly on the ladder, grinning savagely meanwhile at the sportsman, he went a little distance off and died. It would have been very awkward

for the Colonel had his ladder been upset on that occasion.

As a general rule, however, a tiger suddenly startled by the report of a rifle, and severely wounded by the bullet, if not bowled over on the spot, seeks flight without any idea of retaliation; and if he should leave the place mortally wounded, will probably go but a very short distance, and die; though usually, if he receives his death-wound from a powerful express rifle, he is floored on the spot, and easily put out of pain.

Head-shots at tigers should never be taken if doing so can possibly be avoided. The brain of a tiger is small, and it lies low and far back in the head, the skull sloping backwards so much that, unless at the side, and at very close quarters —in which case a shot through, or just in front of, the ear-hole will prove instantly fatal,—it is dangerous to try to reach the brain with an express (or indeed any) bullet. A good instance of this, which came within my own personal experience in the case of a large panther (a panther's skull is very similar in shape to a tiger's), will be related in its proper place.

If the tiger be facing the sportsman, and the latter can see his chest, a bullet placed in its centre will prove fatal. Sometimes only a risky snapshot at a tiger can be obtained, and in such event it is far better to refrain from firing, than to risk missing, with the probability that the beast will not come forward in any future beat; or wounding him, with the extremely dangerous

necessity of following him up on foot as the result. It is highly advisable, whether the sportsman be posted up a tree, on a rock, or on the ground, for him to make sure that his first shot is a steady and good one, for in such case, if an hour or more be allowed to elapse before any attempt to follow up be made, the tiger is generally found dead.

In following up a wounded animal on foot, or even in looking for one which has gone on with a wound which the sportsman who has fired the shot *believes* to be a mortal one, the greatest possible caution is necessary. The first thing is to give the animal an hour or two in which to die. It may be that luncheon and a pipe (or a cheroot) can conveniently fill up the time during this interval, or possibly the tiger has been wounded too late in the day to admit of giving him this time with any chance of recovering him that evening. In the latter case it is preferable to leave him for the night, and to follow him up on the next day. Even then he may be found full of ability both to travel and to fight on the morrow, and the wound, which the firer believed was a mortal one, may prove after all to be very badly placed.

The next thing is, when the following-up process is begun, for a number of men to advance in a compact body (the guns of course being in front), and at this stage of the hunt, a few dogs, not plucky enough to seize, or to go in close, but sufficiently so to go ahead and to bark when they view the tiger, are invaluable.

Men may be sent up trees met with *en route*

to look on ahead, but not a single one should be otherwise allowed to leave the phalanx, and they ought all to be warned that safety lies in retaining its formation, and that probable death to some of them will ensue should a deep growl, a roar, or even a charge induce them to scatter. In spite of all admonitions, however, scatter they usually will on the first intimation of real and tangible danger, and nearly every year several Englishmen, as well as a good few natives, lose their lives in this most dangerous, but most necessary operation, viz., the following up of wounded tigers on foot.

A comparatively recent English victim in the Madras Presidency was the late Sir James Dormer, its Commander-in-Chief, who met with his death from injuries inflicted by a tiger whom he had wounded on the Nilgiri hills and had followed up on foot.

It is very seldom that a European who has been wounded by a tiger recovers, even though his injuries be not very severe. A fatal result from blood-poisoning is the rule, recovery the rare exception.

It therefore behoves all sportsmen, for the sake of their comrades, as well as of the men with them —quite as much as for their own—to abstain, when shooting with a party, from firing risky and uncertain shots at tigers; for it is often, not the man responsible for the badly placed bullet which has rendered following up necessary, who is killed, but one of his friends, companions, or native beaters.

In following up, should the tiger be found alive and able and willing to show fight, nothing but nerve and straight shooting can be looked to in order to avoid a fatal result in the case of one or more members of the party.

An extraordinary instance of indecision on the part of a tigress occurred a few years ago on the Nilgiri hills. Mr. H., of the police, in a beat, wounded a tigress which escaped into thick cover. He succeeded in getting her driven out once more towards the place where he was standing on the hillside above. He fired and struck her again, whereupon she immediately charged him, his second barrel missing fire. Mr. H. in desperation stood and shouted at her, and the tigress, when quite close to him, funked the last few yards, and retreated to cover, into which he followed her up, and there killed her.

I have never had the opportunity of shooting in the Deccan, but I have heard much about the *modus operandi* in that magnificent tiger country from various acquaintances (military officers) who have shot there.

Permission has to be obtained in the first place from the Government of the Nizam of Hyderabad. After this, shikarries are sent out in the cold weather with a number of cards bearing the name of the sportsman who is organising the shoot. It is their business to locate the tigers (tying up if necessary in certain cases), and to leave in each village, the vicinity of which they may desire to work during the succeeding hot weather, one of the said cards.

While that card remains there, no other shooting party will interfere with the tigers in the neighbourhood.

From all accounts, the jungles in the tiger country of the Deccan are comparatively open, and it often happens that the beat is across an expanse of rocky and rather hilly ground, with low scrub jungle here and there.

Extraordinary bags of tigers have been made in that province, and I have met a young officer of the 7th Hussars, who, during the first two hot weathers which he spent in India, was at the death of forty-two (including cubs) in that splendid tract of country for the sport.

The shikarries of the Deccan know their work well, and frequently, year after year, tigers are killed from the same rock or the same tree. Water is scarce, and so it is easy to show the baits to any tigers which may frequent a given locality, by tying out near each pool in the neighbouring jungles.

The heat in the Deccan during the hot weather is intense, and the days on which there is no khubber (information) drag along very wearily, there being little small game in the country.

A member of a party of three guns, who collectively bagged thirteen tigers in one hot weather, told me that each of his tigers (I think that he personally shot five) cost him about £50. That party, no doubt, disregarded expense and lived very luxuriously, for the officer in the 7th Hussars who is referred to above, told me that his expenses,

while out shooting, amounted to less than they did while living with his regiment at Secunderabad.

In Mysore, tiger shooting is very difficult and often extremely disappointing owing to the quantity of water in the country, and to the size, density and continuity of the jungles.

It is always advisable, when out tiger shooting, to carry some fireworks, in case of an animal which has gone on wounded lying up in a dense thicket whence he refuses to budge.

It is seldom in Southern India that a steady elephant which will face a tiger can be obtained, but if the sportsmen should be in a position to procure one, much risk, in the event of following up becoming necessary, might be avoided. An elephant which has not been well proved in this respect would, however, be most dangerous to try, since there could be little chance of escape for her rider should she turn tail and bolt in tree jungle, as he would probably be brained by a branch, or terribly lacerated by thorns, before his runaway mount had gone far. I would prefer to be charged when on foot by any animal yet created, than to be run away with by an elephant in thick tree or bamboo jungle!

For tiger shooting, it would be hard to beat the express rifle—of course, presuming that a suitable bullet be used. Tigers may be killed with expresses of ·450, ·500, and ·577 calibres. Those which I have personally shot were bagged with a ·500 express, with the exception of one which fell to a 12-bore rifle. At first I used Eley's small copper-

tube papered bullets, and these are very deadly, *provided that they are properly placed* and do not encounter large bones. A much safer bullet, however, is the one which I have for some time past always used for tigers in my ·500, viz., the large canelured bullet weighing 440 grains. This has sufficient hollow lead for conveying the express shock, and also possesses a good solid base for penetration. Messrs. Holland and Holland recommended this bullet for use upon tigers in the very powerful and accurate ·500 express rifle which they built for me, and I found it most effective. I have not tried the Paradox gun on game, but believe it to be a splendid weapon for use upon tigers.

WATCHING FOR TIGERS

The only method, beside beating as above described, whereby tigers can be bagged in Southern India—except, of course, the very rare chance of coming across one accidentally when out shooting, (it has never happened to me when I had a rifle with me)—is by watching for the tiger's return to feed upon his kill.

Watching is most unsatisfactory work, and although an unsuspicious tiger occasionally puts in an appearance while a sportsman is awaiting his return to a kill, the vigil is, as a rule, a fruitless one.

The usual plan is to have a mechān or platform put up in a tree overlooking the carcass, and for the

sportsman to take up his post in it and watch for the marauder's return. If the kill be in an extensive tract of forest, too large to beat, the chance should always be tried, though the sportsman must be quite prepared for numerous disappointments.

There can be no doubt, in my opinion, that the tiger usually winds the sportsman, and so fears to approach his kill.

Exercise all the care and judgment possible, and, even if you can tell to a certainty from which direction the tiger will approach, make the mechān so that if he thus advances he cannot possibly get your wind, yet you will be "done" time after time.

The fact is that guns are so numerous in native villages, and the reward for killing a tiger so tempting to a native, that most of the animals have already learnt the danger of returning to their kills without the exercise of great cunning and circumspection.

My own impression is that a tiger who has previously been frightened when approaching his kill—either by detecting the scent of man or by being fired at and missed by a native shikarrie—exercises exceeding caution in all future returns to feed upon cattle which he may have slaughtered, and I am forced to believe that, before venturing upon a near approach, he makes a complete circuit at some distance, when, should the peculiar effluvium of a human being reach his nostrils, he goes right away, and leaves that kill alone altogether—usually never again returning to it.

Personally, I have never sat up all night for

tigers, nor would I do so. I have always gone home as soon as it became too dark to see the sights of my rifle, unless, indeed, there happened to be a brilliant and early moon, in which case I have occasionally waited for an hour or two after dark.

It has very occasionally happened that a tiger has returned to feed upon his beef after I have gone back to camp, but much more frequently the carcass has been found in the morning untouched by the slayer.

In a fairly quiet place, although it was close to cultivation, I have seen a tigress (which I shot) return as early as 4.30 p.m. on a bright day; but in very sequestered localities the sportsman should take up his post much earlier than this—say at 2 p.m. The ordinary time for the tiger's return is, however, just about or just after sunset, provided, of course, that the jungles are quiet by that time, otherwise he need not be expected during daylight.

I remember upon one occasion watching a kill, which was in a very difficult position, near one bank of a large nullah. The only tree in which the mechān could be made stood between the nullah and the kill, and the wind's direction was from the latter towards the mechān, and the nullah behind it. The tiger had moved off up wind, and therefore if he were to return from the same direction, all would be well, but the tempting nullah behind was a pregnant source of danger.

While watching, I distinctly heard the tiger "swear" at me from the nullah at my rear, and

this noise was evidently emitted when he got my wind, and discovered that there was danger between himself and his prey. Of course I never saw him.

Another time, when watching, I heard a tiger roar more than once and not far off, but he did not appear within sight of my mechān. My impression when I heard him roaring was that he was calling up a friend to the feast, but, as no tiger appeared, it may have been another mode of relieving his feelings on winding danger in place of the "Harrrh!" which I heard so distinctly from the nullah behind me, as just related.

I always made myself comfortable when watching, and, being a heavy smoker, I always smoke. As recommended by the late Mr. Sanderson, a mattress and pillows and a book should be taken up on to the mechān, and as I invariably drank soda-water, and not plain water, when in the jungles, I always took the precaution of opening a couple of bottles before beginning my vigil.

The mechān must be built long enough for a man to lie comfortably at full length upon it, and no plaited bamboo should be placed over the poles composing it, owing to the liability of the latter to creak upon the smallest motion being made.

Once the men who have accompanied the sportsman to his post have been sent away (they ought to retire *talking loudly* as they go) there must be no audible sound. I have always, in mechān shooting, sat alone, for fear of a native attendant moving, coughing, or otherwise emitting noises calculated to spoil sport if intruded at the critical moment (and

no one can tell when that instant will be), when death-like silence must reign. I have even been afraid of the beating of my own heart being heard once a tiger came in view, but this, of course, was unnecessary anxiety.

I conceived, and began to put into execution just before I left Mysore, an idea of my own (which possibly some of my readers may be able to carry out with success) for bagging tigers by watching in large tracts of heavy forest, wherein beating would be hopeless. My plan was to have several mechāns erected on paths likely to be included in the nightly wanderings of any tigers in the vicinity, (they have a *penchant* for paths), and to tie cattle out, one under each mechān, every beast being bound by a strong rope, or should a tiger once cut that, then fastened by a chain. I believe that this plan would be very often successful, since the tiger *may* be in the vicinity, and *may* even dog and watch any men who approach his kill during the daytime, —more particularly in the large forests — and it would at least obviate the noise made in erecting a mechān after the bait had been killed.

If the wind be at all changeable at the time, a second platform on the opposite side of the bait might be simultaneously erected before commencing to tie the cattle, so that the sportsman could, after a kill, take his post in the one which appeared to offer the best chance of success.

It is not probable that a purely forest tiger, seduced from the paths of virtue—viz., game-killing—by the obtrusion upon his path of a fine, fat,

young buffalo tied by a rope, would be forced by previous experience to employ the elaborate precautions which his *confrère* on the borders of civilisation has found necessary for self-preservation, and I opine that considerable success in watching, might, in suitable forests, be attained by this method. I present the idea to my readers. I had only just inaugurated it, and but one of my cattle had been killed, when I went on long leave without pay, in order to practise at the bar. In the case of that kill, the tiger did not appear between about 2.30 p.m. and dusk, and though I subsequently heard that he returned during the night, I had arranged for a big beat on the following day, and therefore could not attend to him. He must, I imagine, either have winded me, or, having enjoyed a big feed elsewhere, was in no hurry for another meal.

I have a decided preference in watching for a second day's kill, *i.e.*, a kill off which the tiger has already supped on the previous night, and of which he has usually eaten the two hind-quarters, but I have always watched whenever I have had the chance — first day or second day — and on a few occasions (out of many) the tiger has come.

Mosquitoes are often very troublesome to the sportsman on the watch, but tobacco smoke will keep them away from his face; and he should wear boots, not shoes, otherwise he will be horribly bitten through his socks. His legs, too, ought to be well protected against these troublesome pests.

A light cap, to exchange for the sola topee after

5 p.m., is a great comfort. I agree with Mr. Sanderson, that watching is very far from uninteresting work, but after many fruitless vigils, Hope, the golden-winged angel, is apt to take flight —*till next time.*

In the Ganjam district, my grandfather, the late Mr. G. E. Russell (afterwards senior member of the Madras Council, but then the Collector there), used to shoot tigers from sloping pits, dug near water, and so arranged that the sportsman reclined at ease, while his eyes scanned the surface of the pool. This is a mode of watching of which I have had no experience, and in a country in which artificial irrigation works are so wide-spread as they are in Mysore, its trial would not be worth one's while.

Sportsmen intending to shoot tigers should endeavour to enlist the sympathies of the district forest officer, who can, if he should choose to do so, render them very valuable assistance.

The best localities for tiger shooting are the Deccan, Canara, and the Godavery district in the South; Central India; Maldah and Purneah, in Bengal; the Nepaul Terai, and the Brahmaputra Churs, in the North of India.

In the Sunderbunds, which are easily reached from Calcutta, tigers are numerous, including some man-eaters which take toll of the woodcutters working therein, but the country is very feverish, and the jungles exceedingly dense.

A fair number of tigers exist upon the Nilgiri, and other hill ranges in Southern India, but such,

though occasionally bagged by beating, are perhaps even more frequently encountered accidentally.

Captain Forsyth, in *The Highlands of Central India*, describes a method of tracking-up and shooting a gorged tiger from the back of an elephant, no beaters or pad elephants being employed, but this plan is not practised in Southern India.

CHAPTER IX.

INCIDENTS IN TIGER SHOOTING

THE first tiger which I ever saw (outside of a cage) was in Assam, over twenty years ago. I was then quite a novice, had not bagged even a single head of big game, and upon that occasion I missed a very easy shot.

The coolie women, on returning from work, had seen a tiger carrying a dead bullock (or cow) through the tea, and had raised a shout, whereupon the robber had dropped his prey, and had bounded through the tea bushes, across the estate road, and into a huge sea of high grass and reeds beyond.

I went out at once on hearing the news, and had a charpoy (or native bedstead), formed of a coir rope network fixed in a wooden frame, put up in a tree not far from the carcass, and then I got up, lay on it, and watched.

While it was still quite light, I suddenly became aware that there was something under me, and, looking through the coir network, I saw a little cub sniffing about the place where the men had erected two upright posts to support the front of the charpoy.

The next moment I saw, what appeared to me an enormous tiger, walk slowly across my front. The animal seemed to me to be as big as a bullock, but it was probably only a tigress, the mamma of the cub which I had just seen. In my excitement I missed clean, and the beast bounded back into the huge expanse of grass whence she had come. The cub must have taken a line of its own, for I did not see it after I had viewed the big one.

My feelings may be better imagined than described!

The opportunity was certainly a splendid one, and I had miserably failed to avail myself of it. It would indeed have been satisfactory had my first head of big game been a tiger; but, alas! my own unsteadiness, from intense excitement due to extreme keenness, had alone prevented this desirable result.

This was the only tiger which I saw during five years' residence in Assam and Sylhet, though I availed myself of every opportunity of watching for them, whenever I received news of a kill.

In the autumn of 1881 I left Assam and went to Mysore, where I had been offered, and had accepted, an appointment in the Forest Department.

I had previously met the author of *Thirteen Years amongst the Wild Beasts of India* quite accidentally in Calcutta, and first heard of his book (which, of course, I at once purchased) from himself, and I was charmed at the prospect of going to a country where sport is obtainable on foot;

whereas in Assam, without employing tame elephants, and consequently incurring much expense, a sportsman can do nothing.

In 1882 I had many opportunities of big game shooting, and I bagged my first elephant and some bison, deer, and pig, but did not even *see* a tiger.

On the 14th December, 1883, on my return from inspection duty to my camp at Naganipur, news was brought me that a tiger had killed a bullock at no great distance. I hurried off to the spot, and sat on the ground on one bank of a shallow nullah in which the carcass lay, but up till dusk, when I returned to camp, the tiger did not appear.

The next day I went to see if he had visited his kill during the night, and found that he had done so, and had moreover dragged the bullock to some distance, leaving it in a very dense, thorny thicket.

I had a mechān put up in a tree near, and caused the carcass to be dragged from under the dense canopy of thorn, and left in the open in front of my tree.

During my vigil, a jackal came and loafed round the kill in an aimless sort of way, and at some distance from it, as if he had not seen it at all, and then disappeared in the jungle.

Presently, having obviously made a complete, or almost complete circuit, he reappeared from the direction in which he had first shown himself, walked up to within a few paces of the defunct

bullock, and then jumped backwards, as if alarmed. He repeated this performance several times, going a little nearer to the coveted beef each time, and then craned out his neck as far as he could, and gradually and cautiously touched it. Directly he touched the kill, all his fears appeared to evaporate, as he evidently made up his mind that had the tiger been anywhere near, his preliminary acrobatic performances would have elicited at least a warning growl. He thereupon set to work in a very business-like way, and tore the stomach open, when a most fearful stench rose in the air and seriously incommoded me. I squirmed slightly on my mechān, the jackal gave one upward glance, bolted, and I saw him no more.

At a little before six o'clock, while it was still quite light, I saw the tiger advancing slowly through the thicket in which the kill had been placed, and from which it had been dragged a few paces by my orders, so as to render the way clear for a shot should he come. He looked backwards only once, and then came right up to the kill. I was afraid of his seeing me and dashing off alarmed if I raised myself before his head was hidden by my mechān, but as soon as it was out of sight, I elevated myself and my rifle and fired down upon him. As the smoke cleared away, I saw him slowly disappearing, as if he were dragging himself along with difficulty, and I fired a snapshot, which apparently missed. I got down as soon as my men, hearing my shots, came with a ladder, and then I found that my first bullet

had grazed a green stem on its way to the tiger, who, however, had evidently gone off severely wounded.

I returned to camp, and wrote at once to Government requesting three days' casual leave, during which I hoped to bring the wounded beast to bag.

I had two dogs in camp with me, one of which, "Carlo" by name, was a nondescript animal, regarding whose origin, and the number of breeds contributing to whose composition, it would have puzzled the doggiest man alive to form even the faintest opinion. He was formerly the property of an Ootacamund native shikarrie, and had been much used in sport on the Nilgiri hills. He was kindly procured for, and presented to me by Mr. (now Colonel) N. C., the hero of the boxing match with the wounded bull bison which is elsewhere related. "Carlo" was a capital dog out shooting, in spite of his having lost an eye before he came into my possession—whether by the horn of a sambur stag, or by the quill of a porcupine, I never learnt. My other dog, or rather bitch, was a novice who rejoiced in the name of "Puppy," and she too was a mongrel, with a predominating touch of fox terrier in her.

Next morning, accompanied by a good many men and by my two dogs, I set out to follow up the wounded tiger. We proceeded to the spot where he had been wounded, and followed up the blood trail, which led through terribly thick stuff, in which the danger was extreme, the advance being of course proportionately slow and cautious.

We had in some places to even cut our way. Presently, we heard the tiger groaning in front, but could not see him. The tracks entered a lightly jungled ravine which debouched into a stream, the latter in its sinuous course permeating many portions of the Naganipur jungles. Telling the men to wait till I had got on ahead, and then to throw in stones and to loose the dogs, I went down to the spot where the ravine met the stream, and then I saw by the tracks that the tiger had already crossed, so we had to follow up again. After some distance they led into a very densely jungled, but narrow nullah, and I directed the men to let me get well ahead, and then to come along it on both banks, throwing in stones, and keeping the dogs at work, but on no account to themselves enter the ravine.

I accordingly went ahead with a man carrying an 8-bore ball gun, while I took my ·500 express, and making a détour, we struck the nullah bank some distance down, when, taking the precaution to relieve my attendant of the spare gun, I placed the latter resting against a tree. I stood on the bank and waited the issue of events.

The beat began, and by-and-by I heard old Carlo barking, and very shortly afterwards, out came the big, round head of the tiger, on my side of the nullah, and only some twenty or thirty yards off. His head alone was visible, but he apparently wished to break out at the side, in which case he would have given me a broadside shot; when, as bad luck would have it, my attendant, overcome

with fear, fell, and the tiger, his attention thus drawn to my direction, instantly spotted me, and with a "Woof!" he started forward at me. I fired immediately, and he disappeared in the nullah. I at once shouted to the men to retreat, and then proceeded cautiously to the spot at which he had vanished.

There I saw, in the erebean darkness caused by the dense shade, two fiery balls at the bottom of the deep ravine. I made sure these were the eyes of the tiger, and, aiming carefully between them, I fired, and then found that what I had thus mistaken for eyes, were but two gleams of sunlight which had penetrated the blackness of the gloom below, and that the tiger had gone back down the nullah. We followed, and found that he was in anything but an amiable temper, as he had *en route* picked up a thick piece of creeper stem and had bitten it, leaving blood upon it. We carried the tracks back across the stream until they entered a very dense thicket, and there I pegged a piece of paper to the ground to enable us to find the exact spot on the morrow, and then returned to camp. Heavy rain came on, and I almost despaired of our ability to distinguish the tracks next day as the rain would certainly wash away all bloodstains from the trail.

Next morning we went to the spot at which we had left the tracks, and the men began cutting the jungle to enable us to get through, when, from close in front of us, we heard a heavy animal moving off. Taking the men with me, I made a

détour, and we found, in front of the thicket whence the sound had proceeded, a small piece of perfectly open ground, in advance of which lay a dense patch of sigee thorn which came nearly down to the ground, and so allowed of no view. As we approached this second thicket, a deep growl sounded from under it; I told the men to stand firm, and they behaved well.

In front of the impenetrable cover flowed the stream, and I put the men up trees in a semicircle, the extremities of which touched its banks, and directed them to give me time to cross its bed and to ascend the further bank, after which they were to shout, and fire shots from a shot-gun which I had placed in the hands of one of their number.

I crossed and took up a position on the further bank, and the shouts and shots rang out without any effect; and we then found, on examining the thicket, that the tiger, after growling at us, had crossed the stream and gone on, and that he was therefore not in the beat at all when our arrangements were completed. Under the thorny canopy, we found several blood-stained forms where he had lain during the previous night; and he must have moved from this thicket to the one from which we heard him moving off (and at which we had left his tracks on the previous afternoon), after lying for a long time—probably all night—in the former. Evidently he was desperately wounded. We followed his trail for some distance after this, and found that he had crossed a small

hill, during his progress over which he had been obliged to lie down several times.

That the tiger could not have got away, had I a steady elephant, was certain, but that we had no chance of bagging him, in the dense thickets in which he always took shelter after crossing a bit of fairly open jungle, was equally sure; and that to press him at such a disadvantage would lead to a fatal accident, was most probable; so that at last we decided to return to camp, and to send out thence to the neighbouring villages to procure all the nets which we might be able to obtain, with the aid of which we hoped to bring him to bag on the following day. I therefore went back to my tent, and that evening I sat on the ground in the jungle, with a kid picketed in front of me, and bagged a panther.

Next morning, having succeeded in obtaining only a few nets, we went out and again took up the tracks, which soon led into a large and very dense thicket. Six or eight times the number of nets at my disposal would have been necessary to enclose the same, which was situated on the bank of the stream, where the latter made a bend at nearly a right angle. I therefore put up the nets across part of the base of the enclosed triangle as far as they would go, and from their termination stationed men up trees to the stream on the other extremity of the base, and also along the portion of the bank which was out of my sight, while I crossed the sandy bed and sat on the further bank at the apex of the triangle. Presently, shouting

and firing of shots began, and continued with vigour for some time, but nothing appeared. Carlo, however, had gone off to perform a little personal investigation, and I soon heard him barking vigorously under a tall banyan tree which I could see from my post.

Upon this, as shouts and gun-shots were ineffectual to move the tiger, and thinking also that he might be lying dead under the banyan tree, I decided to go and look him up inside the thicket; and so, taking my own position in the centre of a line of men armed with spears, I followed the still distinct blood-trail, the men with their spears beating down the jungle as we advanced. After a time, from almost under the spears, up jumped the tiger, who went off with a loud "Woof!" Not one of us saw him in the dense cover, but the spearmen retired as if but one man! After ineffectual attempts till evening to obtain a sight of the tiger, I had to give him up and to return to camp.

On the following day—the last of my leave—I went again to the thicket, but the animal had left it, and we were unable to trace him, so I was obliged to abandon the wounded beast—very much to my chagrin.

This was the 19th December; the Christmas holidays began on the 24th idem, and I had determined to spend them at this camp in trying for tigers and panthers.

I had occasion, in the interim, to go on duty to a place called Maddur, where there is a travellers' bungalow, which is some thirty miles from

Naganipur by road, but only about ten miles distant across country. I therefore decided to march through the jungle, with my requirements for three days carried by coolies, and as I should have no time for shooting, took only my ·500 express rifle with but six cartridges.

On my way to Maddur, I rode through two or three villages, which, from their position, must, I imagined, suffer occasionally from the big striped cat's partiality to beef; but in answer to my inquiries in each, I received the same reply, viz., that there had not been a "kill" for months. I did not believe the villagers, but promised them a present if, in consequence of information received from any of them, I should bag a tiger, and proceeded to Maddur which I reached in the evening.

The next day I had a long day's work in the timber depôt, and I also arranged to inspect another wood-yard seven miles off on the following day. That evening, just after I had sat down to dinner, information was brought me that a tiger had killed a buffalo at a village about three miles off.

As I had to go to a place seven miles distant on the next day, and also to inspect there, I was obliged to entrust a Mahomedan peon with the arrangements. I directed him to go to the spot and to put up a mechān, taking care, however, that the wind should not blow from it towards the direction in which the tiger's advance might be expected.

Next morning early I rode out, did my work,

and returned to Maddur, whereupon, after hastily swallowing some food, I rode to the scene of the kill. The dead buffalo was lying in jungle composed of large clumps of bamboo, and close to the edge of the cultivation. Both hind-quarters had been eaten. As there was no suitable tree handy, the mechān had been made by erecting four upright posts and then building thereon. I began my vigil at about 4 p.m. Half an hour after I commenced my watch, I saw the tigress (for so it proved to be) advancing to the kill across my left front. I seemed, in some subtle way which I cannot define, to have become aware of her presence even before I saw her. My first shot through the shoulder knocked her over, and she then got up and danced on her hind legs, whereupon I put in two more bullets, which finished her. Three out of the six cartridges which I had taken with me had thus been well expended!

Having bagged a tigress and a panther, and wounded and lost a tiger, all within a few days, I was very sanguine of further success at Naganipur during the Christmas holidays. This, however, was not to be, for though I sat over three tigers' and one panther's kills, and also watched with a kid picketed as a bait for panthers on each of seven evenings, I did not even see either tiger or panther, though one of the latter took poor old Carlo from close beside my tent which was pitched in open ground, one evening, while I was sitting over a tiger's kill, carried him off, and devoured him; and

that same night, either this, or another panther killed a pony close to the village stack-yard! I believe, from the servants' account of the canine tragedy, that the panther came into a road near the tents, and that Carlo, seeing him, ran towards him and barked, whereupon the brute seized and made off with the poor old dog. I also tried a beat for a tiger during the holidays, but that too failed, as the animal had left the thicket in which we hoped that he might still be lying.

Captain (now Colonel) W. (late of the 43rd Regiment) bagged a tiger in a very lucky way when he was in camp with me at Bandipur in the Mysore district. He was out after elephants, and, while following the tracks of two, came upon the remains of a bison calf which had been killed and eaten by a tiger, and, moreover, caught sight of the slayer moving off from the place. He followed the elephants, and came up with them when they were bathing in a mud hole, and found that only one of them had any tusks at all, and those were but poor specimens.

He therefore returned to the remains of the bison calf, and making a screen of boughs on the ground, sat with his men and awaited the return of the tiger, who came at about 4 p.m. W. at once fired, the animal fell to the shot, but got up again and bolted. W. ran after him, loading and firing as quickly as possible, and soon reduced him to a sitting position. An old spaniel bitch of W.'s, which was out with him, then ran round and headed the tiger, who put back his ears, snarled,

and spat at her. W. now went in close, and the brute grinned at him, whereupon W. terminated his career by a bullet through the brain, and brought his head and skin into camp with him that evening.

A "globe-trotter" once had the extraordinary good fortune to bag a tigress out with me upon the very first day on which he ever attempted tiger shooting.

At that time I was in camp at Hunsur in the Mysore district, where I had a quantity of work (subsequent to the sandalwood sales) which kept me there for some time. I had been tying out for tigers, one of my baits had been killed, and I had beaten for the tiger without seeing him.

One day I received a letter from Colonel J.—the then forest officer on the Nilgiris, and the late popular master of the Ooty hounds,—asking me if I would help two young friends of his, who had but lately come out from home, to get some sport, requesting me moreover to telegraph my reply. I wired that it was the worst possible season for shooting in my district, and that there was nothing to be done then but snipe shooting, with just the off chance of a tiger,—however, they elected to come.

I had returned to Mysore for a couple of days, having given orders before leaving Hunsur that tying up should be continued during my absence. The two "globe-trotters," S. and B., joined me at my headquarters, and I drove them to Hunsur, which is twenty-eight miles off. On our arrival

there, I was informed that one of my tied buffaloes had been killed on the preceding night, so I made all arrangements for a beat next day.

There was a commissariat conductor stationed at Hunsur, and the best beaters were men under his control, who had been trained by Colonel M., a commissariat officer who formerly presided over the depôt there; so I asked the former to bring his men, and to come himself on the chance of his getting a shot at the tiger.

We went to the place and viewed the kill, and I drew lots for posts amongst the guns. S. and B. drew the places on the extreme left and right respectively facing the beat. My post was next to S., while the conductor's was on my other side. We three were placed at only short distances apart, but B.'s post was far away on the right, in an arm of jungle along which the tiger might, it was thought, try to steal away.

The beat began a long way off, and, for some time, the only sounds audible were the shouts of the beaters, and the tom-tomming and braying of their noisy musical instruments. Then a sambur belled loudly, but did not come on. While the beaters were still at a distance, a single shot rang out from S.'s post, instantly followed by strong tigrine language. I heard a rush—in the direction of my ladder as I thought—and expected every instant to see the wounded tiger break out in front of me. Nothing showed itself however, and I remained silent, for, from the tracks around the carcass of the buffalo, I was under

the impression that two tigers had been feeding upon it.

After a time S. called out to me, "I say, Russell, I have fired at the biggest tiger I have ever seen in my life!" (He had never seen any before which were not behind iron bars.) It appeared at last as if nothing more were forthcoming, so I got down and walked over to his post. His ladder was placed against a date-palm tree facing an open sward, beyond which was dense jungle.

The tigress (for such it proved) had walked along the open at the edge of the cover, whereupon S. fired at her and she fell to the shot, but recovering herself she had disappeared in the thicket. He told me exactly where he had hit her, viz., low down behind the shoulder.

I went to the place where she had disappeared, and crawled under the thorny jungle on my hands and knees for a short distance, and then, having found blood, I went back, resolving to have lunch in order to give her time to die (should she be inclined in that direction) before following her up.

While we were at lunch, we heard an extraordinary cry from the jungle, and the coolies, believing that the tigress was coming out upon them, fled helter-skelter in our direction, tumbling over one another in some cases in their hurry and fright.

After luncheon and a smoke, we proceeded to follow up; I led the way and did the tracking, with S. and B. close on my heels. None of the natives would come in, nor would the conductor

do so. For a short distance I was able to follow the tracks by the blood, though the jungle in many places was very thick; but at last I was unable to carry the trail any further, the blood having apparently stopped. I then went back to the men, and insisted upon two or three of them coming in to track, telling them that they might keep behind me. They came, and again hit off the trail, which led through rather less dangerous jungle, and being enabled once more to make it out and to follow it, I led the way, of course with both barrels of my rifle upon full cock. All of a sudden I was startled by B.'s calling out, "Come back, Russell! Come back!" This would have been a supremely risky move in the presence of danger, so, in place of retreating, I looked everywhere in front in readiness to fire, expecting to see the wounded beast, either crouching preparatory to an attack, or in the act of advancing towards us; but in the next breath I heard him say, "Oh, it's all right, he's dead"; and sure enough, in a small nullah close by on my left, lay the dead tigress. S. had hit her exactly where he told me, viz., low down behind the shoulder, and had thus upon the *first occasion of his going out tiger shooting* bagged a tigress with a single bullet—in a country too in which the successful prosecution of this sport is a matter of very great difficulty. He had certainly shot most creditably, but was very fortunate in obtaining so good a chance.

I once had the luck to bag a tiger within—as the crow flies—about twenty-five miles from the large

military station of Bangalore. I was in camp in a forest in which I had heard of several kills by tigers, and as three or four public holidays happened to come together, I wrote and asked Major (now Colonel) C.-W. and Mr. (now Sir E.) K. (then both of the 21st Lancers) to join me for three days' chance beating. They accepted my invitation, but, as if by magic, all news of killing by tigers ceased, and if I could have prevented their coming, I would have done so, as I feared that they might make an unprofitable journey. However, there was no time to communicate with them, and they duly arrived at my camp. We beat on two days — just on the chance, without any kills — seeing nothing but a pig and a fine spotted stag, at which latter K. fired without effect.

I decided to move camp to Magadi, and, whether one of my ties there were killed or no, to beat at a place about nine miles from the new camp on the day after our arrival at the latter.

I had for some time been tying out about three miles from Magadi, but in the opposite direction to the blocks of jungle, to beat which arrangements had been made; and after moving camp, the men brought in the two baits from the former locality, saying that it was of no use to tie them there, as no tiger was in the vicinity.

C.-W. and K. then went out with their shot-guns, while I remained in camp to look after arrangements for our comfort. They had been gone perhaps half an hour, when a man came up in

great excitement, with the news that a village cow had been killed in the very same place whence my tied cattle had been brought back to camp previously that afternoon. He was very anxious for me to go off with him at once to sit over the kill, but of course I refused, and told him that I would beat for the tiger or panther (I did not then know which it really was) early the next morning. I made arrangements for all the men available in the small village near to be collected and kept ready in the morning.

I had already made somewhat elaborate plans for beating at the other place, nine miles from camp, in the opposite direction on the same day, and had ordered sixty beaters to be in readiness; so, as it was too late to cancel those arrangements, I decided to beat first over the kill, and then to ride across country to the other tract of jungle and to try some chance beats there.

Early next morning we started, being forced to begin the drive at a time which should not be chosen for the purpose, as it is better to beat in the heat of the day, rather than at any other part of it. Only some twenty or twenty-five men were available as beaters. The jungle to be worked was a piece of dense cover at the base of, and extending partially along the side of, a high, rocky hill, rising abruptly from the plain. We drew lots for the posts which the local authorities in jungle matters decided were the most likely. K. drew the one on the extreme right facing the beat, while I drew the centre, and W. the left. K. was posted on a rock

at the base of the hill, while W. and I sat upon the rocky saddle. Above us was a cave situated higher up the hill whose crest towered above our post, and while I had to watch the right side, W.'s care was the left, and below his post the jungle extended up the valley to a point somewhat beyond him.

On my side was dense jungle to within about forty yards of my post, and beyond it a piece of open ground. The portion of the saddle on which I sat rose perpendicularly from this open.

Towards the direction of the beat there were rocks far more elevated than the saddle on which W. and I sat, and two or three men ascended the highest points and watched. Presently the latter signalled that a tiger or panther (we did not yet know for certain which animal had killed the cow) was coming on towards us, but the beat came nearer and nearer, and nothing appeared. At last W. moved over to my post, saying that the men had come right up the valley on his side, and that there was evidently nothing in that part of the jungle, so he would stay with me and help me in case of need.

The beaters on the other side had got ahead of those on mine, and as they continued yelling, I feared that, if there were a tiger still in the beat on my side, their shouts might deter him from coming to my post, and I therefore asked W. to stop the noise. He moved across the saddle for this purpose, when I spotted a tiger inside, but close to the edge of the dense jungle just below my post. The animal gave vent to a loud "Woof!" and raced

across the open in front of me, like a greyhound, in the direction of the path leading to the cave.

I fired twice, and as he stumbled under a banyan tree on the saddle, and about on a level with our posts, W. ran up and gave him a useful shot in the back, and I fired my spare rifle at him. This confused him, and, forgetting all about his cave, he turned round and went back, down the side of the hill which W. had been watching, into the valley below—all arms, legs, and bad language—right on the top of the beaters. It was indeed providential that no accident happened, for I saw him plunge into a bush close to a coolie, and W. fired two or three shots at him whenever he saw him, and at moving bushes when he did *not*, and then the tiger's objurgations ceased, and all was still.

A sandalwood tree growing in the dense cover below was a conspicuous object, and it was in its vicinity that I had heard the last "cursory language," so, as I had some fireworks with me, I caused some of these to be lighted and thrown into the cover. Not even a growl came in response, and I concluded that the tiger had either gone on, or was dead. We then went down, and I found him lying stretched out lifeless on a rock near the before-mentioned sandalwood tree. On examining the body, we came to the conclusion that I had hit him twice, viz., once between the shoulder and chest, —probably the first shot as he raced past me—and again in the foot, and that W. had given him a very serviceable shot in the back.

K.'s post was a long way from ours, and he had

a stiff climb to reach us; but when at last he arrived, we learned that a second tiger had passed near him, but that he had not been able to get a shot at it. It would have been luck indeed had we succeeded in bagging the pair!

We then rode about nine miles across country to the other place, but the beat was fruitless, and a pig which K. hit, though we followed it for some distance, till waning day compelled our return to camp, escaped.

It is very seldom that chance beats, *i.e.*, those undertaken without any certain knowledge of a tiger's whereabouts, are successful; still, they are so occasionally, and upon the first two occasions (in 1895) on which I beat the Lakwallie teak plantations of the Kadur district of Mysore for spotted deer, I bagged a tiger and a tigress respectively. I beat them frequently afterwards, with much more elaborate arrangements and organisation, without even seeing another of these felines.

Upon the first occasion I was alone, and the initial beat was through a large extent of plantation between the Toonga Budra river and the Government road. My ladder was posted against a tree near the bank of the river, where the plantation ran out into a somewhat narrow tongue. Even from my ladder, the deep bank was out of my sight, and I had posted a stop down below it to prevent animals from passing along that way.

The beat was a very tedious business, for not only was the piece of plantation to be driven a very

large one, but the men, before commencing upon it, worked a stretch of forest *into* the plantations, in order to drive into the latter any deer which might be in the former. After my ladder had been fixed, the men who brought it went off to take up their positions as stops; but, on mounting it, I found that at the acute angle at which it had been placed, I could hardly have fired had a stag appeared (unless he was directly under me), owing to my being bent forward in a most uncomfortable attitude. I was therefore compelled to call up the stop who was posted on the river bank, and to cause him to readjust the ladder, and place it at such an angle as would admit of my firing therefrom with comfort.

This done, I sat and waited. After some time I heard the shouts of the beaters afar off, but their progress was very slow; no deer appeared, and I was beginning to get very drowsy—even if I did not actually close my eyes—when, to my great surprise, I saw a large tiger walking along on my side of the river bank, about opposite to the position of the stop posted below the latter, and actually *coming towards the direction of the beat.* Raising my rifle and carefully aiming at him, I fired. The tiger fell at the shot, and I at once fired the second barrel at the little of him which I then saw, but, as I afterwards found, this shot missed. I then waited for some time, the tiger lying where he fell, making only a smothered groaning noise for some minutes, until at last this ceased. Presently, one of the stops came up to my post, and handing down my rifle to him, I descended, and

advanced towards the tiger. While I was walking up to him, he struggled, raised his head, and tried to get up, so I fired at the back of his neck, and again he fell and lay motionless, and, as I thought, dead. I went in close and pulled his tail, and he then began gasping and opening his mouth. I thought that he was just dying, so stood close to him, but did not think that another bullet was necessary—even for humanity's sake—but still the breathing and gasping went on after quite a number of the beaters had come up, so at last I fired another shot which finished him.

This case affords a remarkably good illustration of the care which ought to be exercised in approaching a tiger which the sportsman believes to be dead. Many men have lost their lives owing to want of due caution in this respect.

After the death of the tiger, I had luncheon, and then proceeded to beat (on the chance of deer) two other portions of the plantations, without, however, seeing anything worth shooting.

About ten weeks later I was again at Lakwallie, this time accompanied by a friend—Captain (now Major) G. (of the Gunners)—and one day, while we were there together, I arranged to beat the plantations for deer, or anything worth bagging which might turn up. The first beat was the one in which I had shot the big tiger who would not die for so long a time, and that proved blank so far as anything fit to shoot was concerned, nothing but hinds and does appearing; so we went on to the next beat—my first after lunch on the previous

occasion. The men told me that one of us ought to be posted at the extreme end of the long, irregular tongue of plantation, bounded by the river on one side, and a deep nullah on the other, which was to be driven, and the second gun at one side, only about half-way between the road and the junction of the nullah with the river. I had but a single shooting ladder out with me, and this had been posted at the end of the plantation. I gave G. his choice between these two posts, and he chose the ladder at the end, while I took up a position on the ground amongst the young teak trees. There was a stump about two feet high at the place, and I stood on this, as it enabled me to see a little further.

The beat began, and after a short time I caught a glimpse of the head of some animal moving steadily towards my position through the grass on my front. I at first guessed "wolf," but the next instant I saw that it was the head of a tiger. On my right there was no grass or undergrowth among the teak poles, which grew in even, parallel lines, and I decided to let the animal reach this space before firing. The tigress came steadily and slowly on, and was passing on my right front only twenty-nine yards off, when I fired and dropped her dead by a bullet through the neck. I fired the second barrel, but it was not required, and the bullet only grazed her as she lay.

I had ordered a small boy, who had charge of my spare rifle, to crouch behind the stump on which I stood, and on no account to show himself, and he obeyed his instructions so literally that it was not

until after she was dead that he looked up and saw the tigress. So very corpulent was she, that I thought she must be very heavily in cub, though I subsequently found that one small fœtus—only some nine inches in length—was all that she contained.

At Bandipur, on the 22nd July 1885, a tiger came rather nearer to me than was pleasant. Colonel (now Brigadier-General) P. C. (of the Coldstream Guards) and Major M. (of the Rifle Brigade) were in camp with me. One afternoon, after 4 o'clock, when C. and M. were both out after bison (they had gone out early in the day), I had just started to go for a stroll with my rifle, when I met a man who told me that a cow of his had been killed in the forest on the previous day by a tiger. I at once called for my pony, and rode off to the place guided by the owner of the defunct cow. He was not very clear as to locality; it required a good deal of searching to discover the carcass, and when at last we succeeded in our quest, there were a number of vultures busily devouring it. Both hind-quarters and part of the meat on the ribs had already been eaten. I expected that, should the tiger come at all, he would advance from the front, so I had some stems of a purple-flowered plant, which grew on the spot, hastily stuck in the ground on my front and right side, leaving my rear and left, in which directions the Government road ran, uncovered. I lay on the ground, with a forest peon who had charge of a spare gun. Our arrangements had to be very

expeditious, as the tiger might be expected at any moment. I sent away the other men and the pony at 5 p.m., telling the former to talk loudly as they went along. In about a quarter of an hour after their departure, out of the corner of my eye I saw the tiger advancing from my right rear. He came on and lay down under a tree on my right, and therefore as much out of my reach as if he had been invisible. The stems which had been put in to hide me were very short, and I could not possibly have turned without putting the animal to flight before obtaining any possible chance of a shot at him. He lay there for some time — a very long time it seemed to me—"so near, and yet so far," and I crouched as low as I could, merely watching him.

He surveyed the whole surroundings, looking alternately towards the kill, my shelter, and every point within his sight, as he lay flat on the ground. At last, satisfied with his survey, he got up and walked, not towards the kill, which was some twenty-five yards off in front of me, but between me and it, and only eight or ten paces from me! I could stand it no longer. He towered above the stems in front of me, and I began to raise myself from my prone position into a sitting one, in order to take my shot. He caught the motion on the instant, spun round, and swore just like a cat. I detected a glimpse through the screen of a bit of white (which I took to be the white hair on his chest), and hastily pitching and pulling, fired a snap-shot at him. Jumping to my feet, I saw the tiger

bolting off uninjured through the forest. My second bullet, sent after him as he galloped off, also missed. I returned to camp terribly downcast, and very angry with myself. It was the height of folly to move while he was so close. I ought, like "Brer Rabbit," to have lain very low, and waited for him to turn his back to me and proceed towards the kill, when I could have shot him at my leisure. My only excuse was the intense pitch of excitement to which I had been worked up while the brute lay for so long on my right, in which direction I could not turn to shoot him.

Whether it was this same, or another tiger which attacked my pony whilst I was riding him a few months later, viz., on the 26th November in the same year, I cannot say, but the latter event happened in the self-same forest, and at a distance of only some three miles from the place where the incident above related occurred.

I had driven the thirteen miles between Goondulpet and Bandipur early in the morning, and had on the way shot an undoubtedly rabid dog, which came slouching along the road with the aimless gait peculiar to mad dogs, and with a big bubble of foam hanging from his lips. I had also fired at, and had missed, a muntjac from the road.

Men were ready, as ordered, to go out with me after bison, and we had a long hunt, with the result that I at last bagged a solitary bull. The bison had fallen on a slope, and lay against a young tree, so we could not turn him over. As, in addition to this disadvantage, I had forgotten on that

occasion to take out either a chopper or a small axe, the labour of cutting off his head was a very heavy one. However, by dint of hard work it was done at last; and as my Pegu pony "Box" had been brought up after the death of the bull, I mounted him and started back with my men, four of whom carried the head slung on bamboos, and the others my rifles, luncheon bag, etc.

The sun, though low, was still shining brightly, and before long we struck a cart-track made by rough country vehicles when hauling timber out of the forest; and asking my men whether it went straight out to the high road, and receiving an answer in the affirmative, I cantered off along it at a good pace. The forest was intensely still, and the setting sun shone brightly through the deciduous trees now touched by the blight of autumn. It struck me, as I rode along, how often I had hoped that I might, when out with my rifle looking for deer, chance upon a tiger similarly engaged; and how very awkward it would be, in my now unarmed condition, were one of these animals to mistake my pony's clattering hoofs for those of a sambur, and try to seize my mount. To prevent such a contingency I made a noise as I rode along. After riding some three or four miles at a good pace, I pulled "Box" up and permitted him to walk, while I took out my pipe and tobacco pouch, intending to smoke. I had my pipe in one hand, and my pouch in the other, "Box" meanwhile walking quietly along, and I was about to fill the former, when suddenly a slight rustle in the jungle

on my right front attracted my attention, and there I saw a tiger rushing towards me, crouched low along the ground as he advanced—after the manner of a cat when stalking a bird upon the lawn. I instantly pulled up, and at once turned "Box's" head towards the tiger, and shouted. The brute stopped, but did not offer to retreat, so I then moved towards him, still shouting. He turned round and retreated, but very slowly, looking back over his shoulder every pace or two; and having retired to about thirty or forty yards, sat bolt upright on his haunches like a dog. Fearing to turn my back upon him, I now charged straight at the tiger, shouting and ordering him off; whereupon he bolted, while I made the best time I could along the narrow cart-track till I reached the high road, though branches and thorns overhead rendered riding at any pace a far from easy or comfortable form of exercise.

Of course, it was only "Box" whom the tiger wanted—not myself; but it would have been equally awkward for me had he sprung upon the pony, for the tiger's own fears at finding a man under him would probably have induced him to kill me too.

A good instance of how undisciplined beaters may spoil a drive for a tiger was afforded in a beat which I had in 1895. One of my ties had been killed, but as I could not go to try for the slayer until the next *dies non*, I had a second cow tied, and it also was killed. My shikarrie reported that the villagers said that a tigress with two cubs

inhabited the vicinity. On the first non-working day I went over to the place to beat. The first drive proved blank, and we then proceeded to the second.

My ladder was placed against a large, shady tree, on the bank of a wide, sandy nullah. The beat began a long way off; and at last, after the men had been at work for some time, but were still at a distance, I saw a small tiger cross the nullah some way off, with the evident intention of ascending my bank. The animal went out of sight while covering a portion of the space to be traversed, but afterwards reappeared, and I fired at it with a 12-bore rifle. At the shot, the tiger rushed past my front, roaring, and very lame; and I killed it within sight of my post.

On hearing the shots, the beaters at once ceased to advance, and after a little while I heard them making a noise in such a direction as to cause me to understand very clearly that any other animals, which might be in the beat, would indubitably be driven back, in place of being brought on towards my post.

I got down and examined the slain beast, which proved to be a handsome female, about two-thirds grown.

Had the beaters only kept their formation, and come on in line after the shots, I might have secured both the tigress and the other cub.

I am always most careful about the beaters, and I told the men before beginning the drive on this occasion, that should a wounded tiger break back,

I would at once shout to them to leave the cover; but that if I did not do this after firing a shot—or shots—they were to continue beating without any fear.

I was very angry with them for thus needlessly ruining so good a chance after my special instructions on the subject given to them that same morning, but they were quite strangers to me, and in fact did not even belong to my own district.

CHAPTER X.

THE PANTHER (*Felis Pardus*), THE LEOPARD, OR HUNTING CHEETAH (*Felis Jubatus*), THE SNOW LEOPARD (*Felis Uncia*), THE CLOUDED LEOPARD (*Felis Diardii vel Macrocelis*), AND THE INDIAN LION (*Felis Leo*).

THE PANTHER (*Felis Pardus*) AND PANTHER SHOOTING

THIS beautiful, yet cruel and treacherous wild cat, occurs all over India,—alike on high hill ranges, as in the low-lying and torrid plains—wherever in fact there are sufficiently extensive covers to afford him safe retreats. He is by no means exacting in his requirements as to residence. Large timber forests, light scrub jungles, rocky hills clad with very little vegetation, and the dense reed and grass expanses of Assam, Bengal, and the Terai, all seem to suit him equally well.

It is not surprising that so accommodating an animal should be liable to considerable variation—particularly in size; and, until quite recently, many authorities held that there were two species, respectively termed by Sterndale in his edition of the *Natural History of Mammalia* published in 1884, *Felis pardus*, and *Felis panthera*. There is, in spite of laborious efforts on the part of some

writers to draw the above distinction, not so much difference in size and shape between a large and a small panther as there is between a Leicester sheep and a black-faced highlander, and infinitely less than exists between different breeds of dogs. All the diversity in the case of the "pard" is in size, and in size only; but of course this very point of difference limits the prey of the smaller specimens to dogs, sheep, goats, donkeys, calves, and ponies, while the larger ones can kill in addition full-grown cattle, and even buffaloes.

I have shot a panther which measured in length between uprights (by the method described in a previous chapter on tiger shooting as giving the *least possible* measurement) no less than 7 feet 8½ inches, and I have also bagged a full-grown female of only 6 feet, while many mature animals of the same species are very much less than the latter.

To call the one a panther, and the other a leopard, would be most misleading; for not only are the two animals identical, but the true leopard is the hunting cheetah (*Felis jubata*)—an entirely distinct species. I must therefore take leave to dissent from Sterndale's division into *Felis pardus* and *Felis panthera* of an undoubtedly single species.

The panther varies in the shade of the ground-colour of his skin, as also in the density and depth of colour of his rosette-like black markings; but analogous variation is also very evident in the case of the tiger.

In both panther and tiger the ground-colour of the skin is generally paler in large animals than

it is in small ones; while the spots or stripes, as the case may be, are nearer together in the case of the latter than in that of the former.

The claws of a panther are those of a true cat, being retractile, and the skull is long and low.

The most extraordinary boldness—amounting to sublime impertinence—and the most subtle cunning are found combined in the case of this animal. He will dash into a house or a tent to carry off a dog, but he is very clever in detecting danger when means are being taken to effect his destruction.

Panthers, like tigers, can be bagged by beating, but the natural acuteness of the animal often saves one of the former, when a tiger would, in the majority of cases, go forward to the guns.

One day I was posted on a shooting ladder on the bank of a small nullah in which a pony had been killed by panthers. There was only a narrow strip of jungle, but this was bushy and thick. The beat had hardly begun, when the head of a large panther appeared for a moment from a thicket in front, staring up directly towards me, and was instantly and silently withdrawn. As the men came on, I confidently expected a shot, but the animal did not reappear. He must have seen me, and immediately decided that danger lay with *me*, and not with the yelling mob of beaters.

On another occasion in a beat, I saw a few square inches of a panther's skin through a bush —too far off for a shot upon so limited a view— but the beast slipped away, though how he

managed to escape without my seeing him again I know not.

In a beat at Hunsur, when several guns were posted, a panther entered a bush in front of one of them, but did not come out of it. The beaters came on, but the animal failed to show.

At last, after all the sportsmen had descended from their posts and had handed their rifles to their peons and horse-keepers, the young officer who had seen the panther, not being satisfied on the point, crawled into the thicket on his hands and knees, whereupon the panther bolted right through the crowd, and made good his escape.

At Hunsur, when I knew it, there was but one resident European, Mr. H. (a Scotchman), whose health obliged him to live on the Mysore plateau, since he suffered from consumption. He made bone manure for supply to the planters of Coorg, and carried on a general commission agency, also at times performing contract work for my department in a most satisfactory and reliable manner. He lived with his wife and children in a fine house standing in a large compound. One dark night, just after dinner, while the servants were still going backwards and forwards between the cook-room and the house, Mr. H.'s attention having been attracted by a suspicious noise, he went out to see what had become of a pet sheep which was tied just outside the house, a servant following him with a lantern. He stooped down to feel for the rope by which the sheep was tied, when suddenly a panther, which had killed the

former, stood up (his face quite close to Mr. H.'s), and then silently retired.

Mr. H. took a position inside the house, and having fastened up a lantern to see to shoot by, he watched through a small window; the panther soon returned, and was at once shot dead.

On another occasion at Hunsur, two panthers got in amongst a large flock of sheep, shut up in a yard of the old Government tannery, and killed all but one of them.

Panthers are very fond of sheep, goats, and dogs, and a deadly method of shooting them is to picket a kid in front, and to conceal oneself in a thicket in the evening, and wait. If a panther should hear the bleating of the kid, it will most likely come to investigate, though, of course, if it should chance to approach from the wrong direction, and thus get the wind of the sportsman, it will not put in an appearance.

I shot a very large one in this way only some four miles from my house in the large town of Mysore. Overlooking that town is a high, rocky hill, several miles in length, known as "Chamundi" from the goddess of that name. One day, a member of the Mysore royal family told me that there was a large panther inhabiting the rocks of a certain part of the hill, and he offered to show me the place, adding that he had already tried for him without success. This panther used to kill cattle freely, and was evidently a fine specimen. The native gentleman drove me out along the road till we were under the pile of rocks referred to, where

I actually saw the panther on the boulders far above us.

On a certain morning, I sent a peon to collect all the goats which he could find in the villages near the place, and told him to have them herded all day in the scrub jungle at the foot of the hill below the spot where I had seen the panther. In the afternoon I drove as near as possible to the place, selected an ambush, sent away all the goats with the exception of one kid which I had picketed in front of me, and watched. At about a quarter to six in the evening, when it was still broad daylight, the panther dashed across an open space in front, and seizing the kid, lay down with it beneath his paws. I was sitting on the ground, and there was sufficient intervening grass to prevent my seeing more than part of the panther's head, but he was very close, so I fired at what I saw, and knocked him over. The kid, which was quite unhurt but very much astonished, jumped up and retired to the end of its tether. As I approached the panther, he began to show signs of coming to life again, and a Mahomedan peon who was with me advised me to give the beast another shot, so I finished him by a bullet in the vitals.

When I had got the skull of the panther cleaned, I found that there was not even a scratch of lead upon it, the bullet—a hollow one from a ·500 express rifle—having merely made an outside flesh wound, unduly tearing the skin, and only stunning the beast. This shot is a good illustration of the danger of firing head shots at the *felidæ*. I do

not say that such should *never* be taken, but they should, whenever practicable, be avoided.

It is very common for panthers to kill cattle, and even buffaloes tied out as baits for tigers; and occasionally a beat for the slayers proves successful, though far more often it results in failure.

In some places, where there are rocky hills full of caves, panthers may be shot by stalking them from above when they are out sunning themselves, and they may also occasionally be smoked out of their caves, and then shot. The "French Rocks" in Mysore is a place where these animals have been bagged by both methods.

I once had a favourite dog carried off by a panther before my eyes. I was returning to camp after beating unsuccessfully for a tiger, and was at the time riding a very excellent little Pegu pony, two natives on horseback accompanying me, while the coolies with my rifles were following on foot at some distance.

We were riding along a cart-track through scrub jungle, my dog running in front, when, all of a sudden, in a sandy nullah which was densely wooded, and which was itself in the midst of a large tract of jungle, a dark form appeared and seized the dog, and I saw a long tail on end in the air. I at once shouted, and charged down upon the panther which however carried the dog away into the jungle. As soon as I could stop and turn my pony, I rode back to the men, hurried them up, took my express rifle, and, making a détour, stood

on the nullah bank, and waited, having previously instructed the men to beat the nullah and the adjacent jungle up to my post. Nothing appeared, but as one of the men declared that he had seen the panther in the drive—in which event it must have gone back—I told them to beat back again, while I hurried off and stood on the cart-track where it passed through the ravine at the place where the dog had been seized. Again no panther appeared, but my dog was found. Poor thing! She was in a terrible state, with very deep fang-wounds in her throat, and I made a man carry her to camp. I had her wounds syringed frequently with a weak solution of carbolic acid, and, in spite of her very severe injuries and the resultant swelling, she eventually quite recovered.

I once shot a panther when it was so dark that I could not see the sights of my rifle. I had been sitting on the ground watching a kid which was picketed in front of me in a likely place, but it had grown dusk, and I was about to give it up and return to camp, when, from the jungle on my left front, out bounded a panther which seized the kid, the long tail of the robber standing straight up in the air. Being unable to see my sights, I aimed low and fired, and very fortunately broke the spine of the marauder, whereupon I finished her off. She proved to be a very handsome, though small female.

As an illustration of the importance of using a rifle which fits one really well, I will relate an unsuccessful shot which I once made when it was pitch dark.

Information was brought me in camp that a village buffalo had been killed by a tiger. I ordered a mechān to be put up, and later in the day went to the place. As soon as I saw the spot, I made sure that the slayer was not a tiger, but a panther. The jungle was very poor, the place close to a village, and an examination of the kill confirmed my belief.

Thinking that as the village was so near, and the jungle so low and thin, the panther might not come to the carcass till after dark, I had a live kid brought and picketed, in the hope that its bleating might hasten the robber's return. I told my men to go away, and to return with a ladder so soon as it should become too dark for me to see the sights of my rifle—a very powerful and accurate ·500 express by Messrs. Holland and Holland, and one which fitted me perfectly.

When it had got dusk, the men returned for me, but I decided to watch a little longer, so sent them away again. It soon got pitch-dark, and then I suddenly saw what looked like an upright column of smoke—far too high to be a panther—pass slowly and shadow-like across the place where the dead buffalo lay. The kid, which was picketed just in front of my mechān, had ceased bleating, and all was still. Suddenly the kid gave vent to another "baa," there was a rush directly under me, and I *heard* the tiny bait being seized by the panther, though I could see nothing. At last I managed to make out what looked in the darkness like an indistinct grey mass lying where

the kid had been, and I inferred that this must be a mixture of panther and kid, so putting up my rifle whose sights were quite invisible, I fired. At the shot, the panther rushed off in a great fright, and after the men had come up with torches and a ladder, and I had descended from my post, I found that the kid had been nearly cut in half by the hollow express bullet, which had struck it only a few inches from the fang marks in its throat.

Some time afterwards, when I was in the same neighbourhood, the villagers told me that they had found blood-stained places where the panther had lain down, so that the latter appears after all to have got some of the splash of the bullet after it had broken up in the kid. It was certainly a narrow shave for the robber, but had not my rifle fitted me perfectly, I could not, in the pitchy darkness, have placed the bullet anywhere near him.

As an instance of the almost sublime impertinence often displayed by panthers, I will relate the doings of a pair which committed much havoc in and around the large town of Mysore.

During my absence from the station, a donkey was killed within a few yards of a sentry-box just outside the wall of the gaol. One of the residents, accompanied by a sporting parson who had come out to India to see the country, and for a change, and who was staying with his brother-in-law (the then civil surgeon of Mysore) sat on the gaol wall in the evening and watched. The panther came to the kill and was fired at, but missed.

After this, anxious if possible to show the parson some sport, I purchased four donkeys with the intention of tying them up in likely places as baits for the panthers. They were tied out on one or two nights with no further result than that one of them was lost, or stolen, when duty rendered it necessary for me to go out into the district and to remain there for some time. When I returned, it was only for a few hours, since I drove in twenty-eight miles in the morning and wished to reach a travellers' bungalow twenty-seven miles off in another direction that same evening.

My house was a corner one, situated at the junction of four roads, and on one side was a street—often far too noisy to be pleasant—beyond which, in that direction, lay the thickly populated native town.

The compound was a diminutive one, surrounded by a high wall, and to small silver oak trees therein the donkeys were nightly tied.

The panthers had been killing domestic animals about the outskirts of the town, and one evening an old English gentleman, walking along the road, saw one of them leave the latter, and walk across the little park in which the tennis-courts were situated.

On the night following the day on which I had, as above described, returned to Mysore for a few hours only, and had again left for camp, my wife heard her mare neighing in the stable, and wondered why the animal did so. In the morning, when the ayah (female servant) came with my

wife's early tea, that menial exclaimed, "O, missis, one cheetah done kill three donkeys!" My wife said, "Don't talk nonsense, ayah," whereupon the woman asked her to look, and she got out of bed, looked out of the window, and there, true enough, were the carcasses of the three donkeys lying at their pickets!

That evening his Highness the late Maharajah of Mysore, accompanied by the then civil surgeon of the station (Surgeon-Colonel B.), sat up in the verandah between the bungalow and the compound, and watched; but they commenced their vigil far too early, and went away long before any chance of success could be looked for. During that night, two panthers came and fed upon the donkeys, and on the following morning yet another carcass lay beside the three first slain, viz., that of a pariah dog, which the panthers must have caught in the act of regaling himself upon their prey, and so had killed him too!

Had I been in the station, I should not have expected the panthers to return in such a situation until the dead of night, when all would be still. After this, during my absence in camp, great efforts were made to destroy these panthers, and they were eventually disposed of by natives.

In my early days in India, while in Assam, I once rode close to one of these animals, which took no notice of me as I passed by. It was evening, but still fairly light, when I saw some animal running along the rough path in front of me. I guessed that it was a jackal, until, as it jumped

off to one side, I saw a very long tail; and as I passed the spot, there was a beautiful panther sitting in one of the depressions caused by the removal of soil to form the rough road, looking perfectly unconcerned, and sitting bolt upright on his haunches like a dog. Luckily for me, my pony did not see the brute, or I should probably have come to grief, for he was both hard-mouthed and a stumbler, and would certainly have fallen upon such a road, had he bolted with me.

In Assam, too, I heard one night the death-yell of a favourite dog which had rushed out barking, after a "pheeaow" had been uttering his unearthly cry, and also after a "shikar cry" from the coolie lines had proclaimed the presence of a wild beast. I tried in vain in this instance to avenge the poor dog.

Owing to their extraordinary cunning and marvellous agility and dexterity, man-eating panthers are even more to be dreaded than are man-eating tigers.

Sterndale mentions one, in the Seonee district, which established a perfect reign of terror over a tract eighteen miles in diameter, and which in three years' time killed over 200 people.

The only one of which I have heard in Mysore was killed, or had died, long before my time there. He flourished in the Shimoga district, where he killed a number of people, including a personal servant of the then Deputy-Commissioner (Colonel W. H.), who was marching ahead of his master with the advance guard of his camp. The colonel,

though not a shooting-man, on arrival at the spot and after hearing of the occurrence, very pluckily went down into the ravine, to which the victim had been dragged, and recovered his remains.

I have upon two occasions obtained panther cubs. In the first, the animal was captured when he had gone with his mother to feed upon a beast which she had killed. This cub was large and savage, and I was obliged to cage him. In the second instance, the cubs, three in number, were very young kittens, and I handed them over to a Sholaga woman to feed from a bottle. One survived, and I took him after some time to my house when he was about the size of a half-grown domestic cat. I let him loose in the dining-room, and after he had investigated all the corners, he went to a big spotted deer's skin on the floor, seized it by one of the hoofs, and tried to drag it away! I afterwards handed him over to the doctor of the station, who eventually had to destroy him.

Panther cubs are useless as pets. Their instincts are so strong, that no humanising influence has any permanent effect upon them. If caught very young, they can be kept tame and safe for a considerable time, but with growing adolescence, nature asserts her sway, and they become unsafe in the extreme.

Colonel W. (of the 43rd O.L.I.) once killed a panther, not full grown, in an extraordinary way in Cashmere. He had taken with him a powerful bulldog, and one day, with the aid of the latter and of an alpenstock, he bagged a panther which

had ensconced itself under a rock. The dog seized the animal by the nose and palate, and held on, in spite of severe punishment, until W. was able to kill him by thrusting the alpenstock down his throat and into his brain. Ye gods, what language that panther must have used!

I would recommend all beginners, who may wish to shoot panthers, to try the plan of picketing a kid and of concealing themselves either in a thicket on the ground, or about twenty-five yards off on a mechān.

If, however, as often happens, news should be brought of a kill of a loose pony or cow in an open field, the best plan is to have a pit dug, and for the sportsman to conceal himself therein with his eyes scanning the surface of the ground. Personally, I have found watching panthers' kills very unsatisfactory work; still I have often done it, and it must be sometimes attempted, otherwise a chance may be lost.

In the case of watching a kill, I strongly recommend a mechān in preference to a seat on the ground, since there is so much less probability in the former case of the sportsman being detected by the animal's sense of smell.

When a panther advances to seize a live kid whose bleating he has heard, he is so excited, and so intent upon catching it, that he is far less likely to spend time in precautions than when he is returning to the carcass of an animal which he knows to be dead, and therefore unable to escape.

Should a panther be wounded, great caution must

be exercised in following him up. Do not despise him because he is smaller than a tiger. He is smaller, it is true, but he is even more likely to fight than is a tiger; his teeth and claws are very formidable weapons; and his agility is marvellous, and surpasses that of the larger feline.

Natives — sometimes several at a time — are frequently mauled, and even killed by panthers when the villagers have found one of the brutes in a garden, or in a sugar-cane field, and have set to work to mob him.

Mr. B. (of the Mysore Revenue Survey) had often heard that panthers do not fear a lantern, put up on the mechān and throwing a light upon the kill, on a dark night when shooting would otherwise be impossible. He tried it one night, and had shots at two panthers before eight o'clock, bagging one and missing the other.

This method is practised with great success in the Himalayas, as it is related by "Mountaineer."

My own impression is that a panther is so cunning an animal that he reasons a little beyond himself sometimes (animals *do* reason), and so occasionally comes to grief.

How otherwise can we reconcile "Mountaineer's" bagging of panthers by tying up a bait and setting a light close by? It may be argued that the panther is accustomed to prowl round villages and to see lights; but it may also be as reasonably suggested that he reasons within himself that where there is a light, no preparations have been made to do him any harm. It may also be the result of

experience to this effect, for it is wonderful how soon wild animals (and even fish) profit by the latter, and I cannot doubt that they have means of communication with one another, for which men, as a rule, do not give them credit. It is possible that the light trick, though very paying where it is quite novel, might soon cease to be effective in any one locality after a few animals had been missed, or slightly wounded, in attempting it. On the whole, however, I would recommend the beginner to give the panther credit for reasoning powers, and to neglect no chance of trying to make him reason wrongly.

A tiny pet terrier bitch of my wife's very recently afforded a remarkable instance of *reason* as opposed to *instinct* in animals. While I was practising at the Bar, and during our absence for the two months, annual recess (the courts close for that period), "Midge" was left in charge of a lady—Mrs. M., who lived at a distance of twenty-seven miles from our then residence in Madura.

This lady had been staying in Madura some time before, in a house about three-quarters of a mile from our own, the former being usually unoccupied, and "Midge" had often accompanied my wife when she went to see Mrs. M. while the latter was there.

Some time after our return and "Midge's" restoration to us, Mrs. M., accompanied by her husband and children, came to Madura for a few days, and "Midge" and the children (who were close friends) met, with great mutual delight, at the club one evening. Next morning, after she was let out of

our bedroom, "Midge" was missing, and upon our sending out to search for her she was found at Mrs. M.'s. The last time "Midge" had seen the children, they were living at a distance of twenty-seven miles from the town.

As an illustration of the caution which should be exercised in following up a wounded panther, I will relate an episode which occurred in the Hunsur jungles of the Mysore district. I had gone out with another gun to beat, purely on the chance, as we had no definite information of tigers or panthers at the time. Two or three beats had proved fruitless, nothing fit to shoot having been seen, and we had arrived at the last beat for the day. I was on the right, and my companion about fifty yards off to my left. The beat came on, and at last I heard a shot from the left, instantly followed by strong language from a panther who was quite invisible, but was evidently rushing across between us. Then all was still. I got down and went over to my companion's post. He was a man whose nerves did not admit of his being on the ground when there was any fear of a wounded feline being yet alive. He stuck to his elevated post, but told me what had occurred. I went a little way into horribly thick stuff to investigate, and found blood. I then decided to try a cast round in more open jungle, in order to ascertain whether the wounded beast had left the place or no. I made a tour of exploration by myself, but kept to open ground, and, finding no track leading out, I went back and called up the men—my companion then came—and

we proceeded to make a methodical search; whereupon we found the panther lying dead only just beyond the spot, at the edge of the open and commencement of the thicket, at which I had terminated my solitary reconnaissance. Now, had the panther been alive and physically capable of so doing, he would almost certainly have charged me, from within a few paces, and at terrific speed, and I should most probably have been at the least severely clawed. So difficult is it to see the skin of a panther in jungle—brilliant and conspicuous though it be in the open or in a room—that too great caution cannot be exercised in following up a wounded animal.

The vernacular names for the panther are—

Hindustani—Tendwa, Chita, Chita-bagh, Chota-bagh.

Canarese—Kirba, Ibba, (large specimen Dod-Ibba), Mutt-naie, (naie literally means dog, but owing to superstitious fears of naming dangerous animals, the tiger is often alluded to in Canarese as "dod-naie," or big dog, and the panther as "mutt-naie," or spotted dog).

Mahrathi—Chinna-puli.

Telegu—Burkal.

Gondi—Bay-heera.

In the Himalayas—Táhr-hay.

Thibetan—Sik.

THE BLACK PANTHER

After weighing the evidence pro and con the theory of the black panther being a distinct species, I am of opinion that there is no reasonable doubt that it is but an accidental variety of the common panther. Just as albino and melanoid freaks of nature are by no means uncommon amongst birds of many different species, so I have every reason to believe that the black panther is only an occasional melanoid variety. Apart from the fact that there is no structural difference between the two, we know that in the same litters both varieties have been represented; and just as the common blackbird, for example, has an occasional inclination to albinism, so has the common panther a still more frequent tendency to melanism.

Black panthers are more common in Java than they are in any other country; but there, on the other hand, panther skins are very frequently of such various intermediate hues as to strengthen my contention.

I have but once seen a wild black panther, and that was on the Travancore hills in 1896. I was staying with a cousin resident there on an estate situated in a deep valley, upon the high hills above which we could—sometimes with the naked eye and at others not without a telescope—see the fine wild goat, misnamed the Neilgherry (or Nilgiri) ibex, nearly every day.

One evening my cousin and I had, from the bungalow, been watching ibex upon the opposite ridge, when just above the place where they had been feeding, he spotted a black object upon the sky-line to which he called my attention, and the telescope showed that it was a black panther. The freebooter, disappointed in his quest, wandered about for a short time, looking unsuccessfully for the ibex, and then disappeared in the dense jungle lower down the hill. There was no chance of obtaining a shot at the brute—it would have taken half an hour at least to reach the place where we saw him—and we had to be content with watching him through the glass until he had reached the cover and was perfectly safe.

THE CLOUDED PANTHER (*Felis diardii vel macrocelis*)

Of this rare and beautiful animal, Sterndale says that it is found in Nepaul, Sikkim, Assam, Burmah, and down the Malayan peninsula to Sumatra, Java, and Borneo. I have never seen it, and for the following description of its points of difference from the ordinary panther I am indebted to Doctor Jerdon's work, *The Mammals of India* :—"Ground-colour variable, usually pale greenish-brown or dull clay-brown, changing to pale tawny on the lower parts and limbs internally, almost white however in some; in many specimens the fulvous or tawny hue is the prevalent one; a double line of small chain-like stripes from the ears diverging on the nape to give room to an inner and smaller

series; large irregular clouded spots or patches on the back and sides, edged very dark and crowded together; loins, sides of belly and belly marked with irregular small patches and spots; some black lines on the cheeks and sides of neck, and a black band across the throat; tail with dark rings, thickly furred, long; limbs bulky and body heavy and stout; claws very powerful."

Jerdon gives the length of one as 6 feet 6 inches, but he states that it grows to a larger size. In build it is shorter in the leg than the common panther, and less graceful in motion than the latter, owing to the shortness of its legs as compared with its heavy body. The upper canines are said to be the longest by comparison of all the felidæ.

It appears to be extremely rare, and probably but very few sportsmen have ever seen a specimen.

Doctor Jerdon states that he obtained a young one in the neighbourhood of Darjheeling, and Sterndale mentions two cubs which were owned by Sir Stamford Raffles, and he also refers to a very fine specimen which was once in the Zoological Gardens in London.

THE HUNTING CHEETAH (*Felis jubata*)

The hunting cheetah is the true leopard. As the word leopard implies, it was regarded by the ancients as a leonine edition of the panther (or pard), and having once seen some cheetahs in the wild state, I can quite appreciate the applicability of the name.

This animal is found in Central, and part of Southern India, and in the north-west from Kandeish, through Sindh and Rajpootana, to the Punjab. In Jeypur and in Hyderabad, it is said by Sterndale to be most common, but it does not seem to be numerous anywhere.

It stands high on the leg, is tucked up at the flanks, and has dog-like, and only semi-retractile claws, which are moreover very small; its spots are round, black, and unbroken by colour, and it has a slight mane on the back of the neck. The general ground-colour is bright rufous-fawn. The skull resembles that of a dog, being short and rounded.

Jerdon, and Sterndale apparently following him, gives the length of the cheetah as 7 feet, but as there is a beautiful (or the reverse) uncertainty about the measurements of even so comparatively common and well-known an animal as the tiger, it would be satisfactory to know what method of measurement is employed in each case.

The cheetah is, for a short distance, the swiftest of the larger animals in the world. Its wonderful speed is taken advantage of by native nobles, who keep tame ones for the purpose of catching antelope. It is only animals which have been caught after they have attained their full growth that are of any use for this work; and Sterndale, quoting from *The Asian*, gives *in extenso* an interesting account of the capture of two cheetahs by means of snares set close to, and all round, a certain tree upon which they were in the habit of whetting their claws. The

animal is extremely rare in Mysore. Sanderson never saw one there, and I encountered it upon only one occasion, viz., in August, 1882, when out shooting in the Berrambadie forest of the Mysore district; and this was a wonderful piece of luck to fall to the lot of a beginner. Unfortunately my capacity for shooting straight was less in those days than it afterwards became, and I failed to take full advantage of my opportunity.

I had gone out bison shooting after a very wet night, and was walking with my men through the jungle, when, in an open glade of high forest, I suddenly saw five cat-like creatures sitting up together and looking at us. I at first guessed them to be panthers, and lost no time in firing at, and then running after, them. Although I fired several shots at them, I bagged only one, and I never had another chance at a hunting cheetah. I noticed particularly the peculiar way in which they carried their long tails, the tips of which curved upwards. The slight mane, too, was conspicuous, and the animals looked more like small lionesses than panthers when in full view. The cheetah bagged was a young male measuring between uprights 5 feet 6 inches in length.

The vernacular names for this animal are—

Hindustani—Chita.
Bengali—Kendua-bagh.
Telegu—Chita-puli.
Canarese—Chircha, Sivungi.

THE SNOW PANTHER OR OUNCE (*Felis uncia*)

This beautiful animal has its home in the Himalayas, to which, and to the highlands of Central Asia, its range is confined.

The following is Sterndale's description of it:—"Pale yellow or whitish isabelline, with small spots on the head and neck, but large blotchy rings and crescents, irregularly dispersed on the shoulders, sides, and haunches; from middle of back to root of tail a medium irregular dark band closely bordered by a chain of oblong rings; lower parts dingy white, with some few dark spots about middle of abdomen; limbs with small spots; ears externally black; tail bushy, with broad black rings."

It is said to reach about 6½ feet in length, but no measurements of really undoubted accuracy are forthcoming. Colonel Ward believes that Jerdon's statement of its length, viz., 7 feet 4 inches, is excessive.

The ounce is very rarely met with. Even General Kinloch, who continually spent very frequent leave in Cashmere, never met with it; and Colonel Ward, the author of *The Sportsman's Guide to Cashmere and Ladak*, only saw it twice. He describes it as less rare than hard to encounter, on account of its nocturnal habits. From his account, it is an animal which, if bagged by a fortunate European sportsman, is usually met with quite by chance, and one which cannot with any certainty be specially sought

for. It is found more frequently than elsewhere upon the Thibetan side of the Himalayan range.

The vernacular names for this animal are—

Thibetan—Stian, Iker.
Bhotia—Sah.
Lepcha—Phalé.
In Simla hills—Burrel-hay.
In Kunawur—Thurwag.

No doubt, by every Hindustani-speaking native outside of the localities above mentioned, it would be called by the vernacular, generic name of "bagh," or "chota-bagh," just as is the panther.

THE INDIAN LION (*Felis leo*)

This animal, which used to frequent the North-West Provinces, Central India, and the Bombay Presidency, is now, alas! almost extinct, being found at the present day, so far as I am aware, only very rarely in Guzerat, and possibly in Cutch. Doubtless the reasons which have led to its almost total extinction, are the ease with which it can be shot, on account of its preferring comparatively open ground to thick forest; and its want of that cunning which renders the tiger, and still more the panther, so difficult to bring to bag. When the late Duke of Clarence was out in India, he had a beat for lions, and two or three were seen, but not one was secured.

The Indian lion appears to differ from the African only in the mane of the former being less developed

than that of the latter, and in the fact of the *black* mane, sometimes seen in African lions, never appearing in the case of their Indian cousins.

There seems to be no reason for believing that the lions of India and of Africa belong to different species, the slight diversity between them being easily and satisfactorily accounted for by the difference in the nature of their haunts in the two countries.

Sterndale gives the length of the lion as 8½ to 9½ feet; and Mr. Selous records the length of two lions shot by him in Africa, and measured between uprights, as 9 feet 11 inches and 9 feet 1 inch respectively.

It is sad to reflect that in a few years the lion will be as extinct in India as is the wolf in England, but it is indisputable.

The vernacular names for the lion are—

Hindustani—Sher, Singh, Sher-babbar.
In Guzerat and Cutch—Oontia-bagh.

CHAPTER XI.

THE CHIEF BEARS OF INDIA

THE INDIAN BLACK SLOTH BEAR (*Ursus Labiatus*)

THIS bear derives its specific name from its long snout, and the general "lippy" appearance of its muzzle. It is common in suitable localities all over India proper; though, according to Blyth, it is not found in Burmah.

The sloth bear is often seen when beating for tigers in the Deccan, but is generally allowed under such circumstances to pass unscathed, for fear of a shot alarming the more coveted animal, should he be in the beat, and so of causing him to break back through the beaters in place of coming on to the guns. In length this bear measures from 5 to 6 feet, and stands about 3 feet in height.

Bears possess certain idiosyncrasies which are very characteristic. For instance, they are very liable to attack when unwounded if suddenly encountered at close quarters. Again, on a female bear accompanied by her young being disturbed when out feeding, the cubs jump on to their mother's back, and hold on by her thick, shaggy hair while she beats a hasty retreat.

If two or more bears together be encountered,

the wounding of one of them is usually the signal for a free fight between the animals, owing to the wounded one "going for" the unwounded.

Bears are very fond of sweet things, and they ascend the toddy trees in Mysore to drink the juice of the date palm, which is collected in earthen pots suspended below incisions made in the crowns of the trees. They are devoted to honey, and in Central India to the sweet flowers of the mohwa tree (*Bassia latifolia*), and they are also very partial to sugar-cane, and to both wild and cultivated fruits.

The sloth bear is moreover insectivorous in his habits, and in jungles frequented by him stones will be found upturned, and white ants' nests dug up, in his search for larvæ and grubs of sorts. He is said to occasionally eat carrion, but this is foreign to his usual habits.

In parts of Assam, where bears are numerous, natives are often attacked by them without any provocation; and, as the bear always strikes at the face, they are frequently horribly disfigured by these animals.

Sterndale says:—"There is frequently an element of comicality in most bear hunts, as well as a considerable spice of danger; for, though some people may pooh-pooh this, I know that a she-bear with cubs is no despicable antagonist. Otherwise the male is more anxious to get away, than to provoke an attack."

I can only say that the first bear which I ever saw in the jungle—an old male—allowed his angry passions to get the better of his prudence. We

had followed his tracks for a considerable distance, at first in the low country, and then up a rocky hill. The men, having lost the tracks, were searching for them, when, from under a boulder which we had already passed, proceeded some very strong ursine language. In two or three seconds more the bear appeared on the top of the boulder, advancing towards us in a very bad temper indeed, when a bullet from my ·500 express in the neck killed him. Had this bear only run away down the hill, I could not even have seen him on account of rocks; but being a "three-cornered" brute, he preferred to show fight on no more provocation than that of being disturbed while enjoying his siesta. I have reason therefore to question Mr. Sterndale's dictum on this point, and I believe that the natives who have been mauled by bears which they have suddenly encountered have been injured alike by males, as by females, with or without cubs.

The Indian sloth bear measures from 5 to 6 feet in length. The male possesses a unique bone, out of which a paper-cutter may be made.

There are several methods whereby bears may be brought to bag.

In some localities, they may be driven out of jungle by beaters, precisely as are tigers. In such cases it is merely a question of a steady shot just behind the shoulder, should the bear be passing the sportsman's post; or through the yellowish or white horse-shoe mark in the centre of the chest, should he be coming towards the rifle. Bears often show remarkable vitality so far as body-shots are con-

cerned, but if wounded and followed up, though very liable to charge, they can be easily brained by a bullet when within a few paces from the rifle.

In jungles little disturbed by man, bears may be found in wet weather, when their tracks are rendered visible, by following them up to their lairs—often mere depressions or forms in the shade of bamboo clumps, or hollows under overhanging rocks; and in the mornings, and in the afternoons also on cool, cloudy days in the monsoon, they are often come upon by chance when they are out feeding, and while the sportsman is in quest of other game.

Sometimes bears are to be found in high, rocky hills with no other superficial cover than huge boulders and a little scrub jungle, but in such cases there are usually deep caves which form the lying-up places of the animals during the day. In the latter case, they may he shot in one of two ways. Either the sportsman must ascend the hill frequented by them so early as to reach a position above a favourite cave before earliest dawn, and shoot them on their return from their nocturnal wanderings; or, should the caves be shallow enough to admit of it, he may shoot them in the day-time by rousing them out, by means of stones or fireworks thrown into the mouth of each much-frequented hiding-place. Of course, in so doing, he should, if it be practicable, take up his position *above* the cave.

The traffic and signs at the mouths of the caves will indicate which of them are most commonly used

by the animals. Bears wander a great deal, and, unless in the case of a female with very young cubs, they do not seem to confine themselves to any one home in particular.

They make a hideous noise when wounded, and I have heard one, which the late Brigadier-General A. and I encountered accidentally when we were following the tracks of bison, and which when disturbed rushed through long grass closely pursued by us (we could not see it on account of the cover) grunt just like a pig. It was not until the bear, embracing a tree with one paw, stood upon its hind legs, that the General or I obtained even a glimpse of it, whereupon a bullet from his rifle knocked it over, though such was its vitality (albeit but a small female and rendered absolutely *hors de combat* by the first shot) that it required two or three more bullets to put the beast out of pain. Bears sometimes, when playing or quarrelling, make a noise which can be heard a long distance off.

In the Mysore country, in the district bearing that name, the best spots which I know for bears are the tract at the foot of the Billiga Rungun hills, near Punjur, in the Chamraj-Nagar taluq ; and the hills called Gopalsawmy, Kurdeebetta, and Sigeebetta, near Maddur, in that of Goondulpet ; but they are also found occasionally in most of the large forests. In the Kadur district of the same province, the vicinity of Sacrapatam is a good locality for them, and there are some also near Tarikere, and in many other places. A tent may

be taken and pitched near the Iyenkerray tank, which is also a good locality for spotted deer.

In the Bangalore district, bears are to be found sparingly near Bidadi, and also near Closepet, both on the railway line between Bangalore and the town of Mysore, and also in other localities.

Bears are very fond of hilly ground—particularly where there is a good deal of rock—and though seldom found in any number in any one tract, places in which two or three are known to frequent a certain area occur in all large stretches of suitable jungle.

Two or three specimens of this bear will probably satisfy any sportsman who has come out from England to bag Indian game with but limited time at his disposal.

The vernacular names for the Indian black sloth bear are—

Hindustani—Bhalu, Reech, Reench, Adamzad.
Canarese—Kurradee.
Telegu—Elugu.
By the Gouds—Yerid or Asol.
By the Coles—Banna.

THE HIMALAYAN BLACK BEAR

(*Ursus Torquatus vel Tibetanus*)

This bear is black all over, with the exception of a white chin, and a white V-shaped mark on the chest. Its head is rounder and handsomer than is that of the Indian black bear, and it lacks the

ugly snout-and-lip-development of the latter. It is also larger and heavier than the preceding, being found up to seven feet in length, though, generally speaking, even the males measure less than six feet.

It is found all over the Himalayas in British India as well as in Cashmere, but it apparently does not occur in Thibet, so that one of its specific names is a misnomer, and ought therefore to be abandoned. General Kinloch and Colonel Ward differ somewhat in their respective opinions as to the favourite habitats of this animal, the former stating that it is perhaps more numerous in parts of Cashmere than elsewhere, while the latter is of opinion that more are to be found in parts of British India — such as Ghurwal and Chumba, etc. In summer it is often found at high elevations close to the snow.

Unless shot between the middle of March and the middle of May, or in November, the skin is worthless.

The menu of this bear is a comprehensive one, and very little edible matter appears to be omitted from it. Wild and cultivated fruits, berries, crops (especially maize, buckwheat, and barley), acorns, roots, insects, honey, cucumbers, pumpkins, and carrion are all included. Occasionally it kills domestic animals, not sparing even cattle. It sometimes shows fight when wounded, but more often tries to escape. Frequently, when suddenly disturbed at close quarters, it will attack men without further provocation. Its sense of smell is

acute, and care must be taken to approach it up wind.

This bear is fond of forest, and when the cultivated fruits and crops are ripe, jungled ravines in the vicinity of cultivation are his favourite haunts, where during the day-time he lies up in a thick clump, a hollow trunk, or amongst rocks.

He is often shot by moonlight in, or on his departure, at earliest dawn, from orchards when the fruit on the trees is ripe, but he may also be beaten out of cover, and is sometimes encountered, stalked, and shot when feeding in the open, just like any other hill game. He hibernates, but occasionally during the winter goes out on a foraging expedition, and is not blessed with good eyesight.

The vernacular names for this bear are—

Hindustani—Bhalu, Reech.

Lepcha—Sona.

In Cashmere—Harpat.

THE BROWN, RED, OR SNOW BEAR (*Ursus Isabellinus*)

This bear is the largest and finest of the Indian Ursidæ, and his skin, when the fur is in condition, either in November or in the spring—say till about May 15th—is well worth obtaining and preserving. He is found only upon the Himalayas, where in summer he often ascends to great elevations, and may be found close to the snows. Both this bear and the preceding have become much scarcer than they once were, and the large bags of these animals, formerly made by men who devoted their time

to this particular game, are now things of the past.

He appears to attain seven feet or more in length, but individuals vary much in size as well as in colour, the fur of some being of a very much lighter shade than that of others.

The brown bear strictly hibernates, his lair being often covered several feet deep in snow, and he emerges from his winter retreat about April. Roots, insects, fruit, acorns, grass and grain form the food of this bear, who is, however, when usually encountered, viz., in the spring, practically restricted to a diet of roots, grass, and insects.

Like his black cousin, his sight is poor, but his sense of smell acute. The brown bear is usually stalked and shot when out feeding in the open, endeavouring to compensate for his fast of several months' duration. Occasionally, but rarely, he has been known to charge after being wounded.

In parts of Cashmere, in Gurwahl, in Chumba, and elsewhere in the Himalayas, there are still a fair number of bears. Colonel Ward mentions that, as a rule, they are not found at a lower elevation than 8000 feet.

The vernacular names for this bear are—

Hindustani—Lal Bhalu, Reech.
In Cashmere—Harput.
In Ladak—Drin-Mor.

CHAPTER XII.

THE INDIAN ELEPHANT (*Elephas Indicus*) AND ELEPHANT SHOOTING, WITH NOTES FOR BEGINNERS

THE Indian elephant is too familiar an animal to require any detailed description. It may however be remarked that it is very seldom that a wild elephant appears of any other colour than a rusty-brown—a very different hue from that of the deep-black bun-eater of the Zoological Gardens, the menagerie, and the circus. The reason for this is that the wild animal loves to cover himself with mud, as a protection against the attacks of insects from which he suffers much irritation; for, although his skin is thick, the black epidermis thereof is very thin, and immediately beneath the latter lies a vascular net-work; consequently, flies of about the size of, and very like, the common English horse-fly, can draw blood freely from the animal, and they worry him exceedingly.

Tame elephants are washed frequently, and hence the remarkable difference in appearance between the former and their wild congeners.

Owing to his being protected by the Government, which permits the destruction of only such

individuals as from their habits have become dangerous to human life, or habitually destructive to property, the Indian elephant is still numerous in most of the large hill and forest tracts of suitable character, from as far north as the foot of the Himalayas, to the extreme south of the peninsula.

Elephants are gregarious, and are found in assemblies of exceedingly variable proportions; the herds themselves often subdividing—as the exigencies of fodder may render necessary—into small groups, each consisting of only a few individuals. A large herd consists of from fifty to one hundred, and a small one of some fifteen or twenty animals. It is, however, very common to find a single male elephant, or even a pair of males, wandering alone at some distance from the nearest herd. When these solitary animals are mucknahs (or males without tusks) it is probable that they may have been compelled to lead single lives on account of the bullying of the tuskers, of whom they stand in great awe; but frequently, even the lord of the herd—a magnificent creature of great stature, and possessed of very formidable tusks—is found leading temporarily, and entirely from choice, a life apart from his harem. He no doubt knows where the ladies are to be found, and visits them at intervals; but he appears to prefer alternate solitude and company, to the uninterrupted society of the herd. It may well be that he dislikes continual noise, and is worried by the constant trumpeting and squeaking of the females and young ones. Often too a young male

elephant is seen alone, and this is probably due to certain ivorine hints given him by the master, when the youngster has shown himself somewhat inclined for flirtation with some member of the sultan's harem. Solitary elephants, or male elephants when temporarily leading a single life, often become much bolder and more aggressive than are others. They are very apt to trespass into crops at night, in which case the damage done by them is enormous; while they find the living so much to their taste, that, if driven off, they speedily return for another succulent feed.

The ryots, watching their crops from platforms erected in trees, or upon uprights in the fields, are apt to fire at them with whatever fancy may suggest as a telling pattern of projectile (*e.g.*, I have read of a screw-nut in one case, and a portion of a military ramrod in another, having been found in the heads of rogue elephants subsequently slain with suitable weapons by the European sportsman). The wounds thus inflicted by the native seldom do much real, permanent bodily harm to the animal, but they are calculated to seriously affect his temper; and to them is probably due the fact that a solitary elephant, who formerly did no more harm than destroying and devouring crops, sometimes develops into that most dangerous brute, a "rogue," who, regarding man as his implacable enemy, attacks him on sight, and, if he can do so, ruthlessly kills him.

Only in the case of a "rogue" can the sportsman ordinarily hope for permission to shoot an elephant

in British India. In some of the native states, however, as also in zemindaries, leave to shoot a tusker may occasionally be obtained, but such opportunities are very exceptional.

Wild elephants shirk the sun as soon as it has got high—say at about 10 a.m.—from which time till 2 p.m. or so (unless, indeed, the day should be cloudy, or wet and cool) they retire to rest in dense shade.

Grass, leaves, wild fruits, and bamboo shoots form the staple diet of this animal, and the amount of fodder which he gets through in twenty-four hours is prodigious. He is very particular as to what he eats; and when grazing upon grass which comes up by the roots as he gathers it with his trunk, he carefully bites off and throws away the lower portions of the stems with their attached rootlets.

Wild elephants feed and lie down alternately during the night, and they also graze in the early morning, and again in the afternoon and evening.

It may, I think, be taken as proved that the height of ten feet at the shoulder is never attained by the Indian male elephant (which is, of course, much larger than the female), though large animals grow to very little short of that height. Out of many hundreds measured by the late Mr. Sanderson—who probably knew more about elephants, their capture and their training, than any European who has ever had to deal with them—the three largest males were 9 feet 10 inches (one) and

9 feet 8 inches (two) respectively, while the two tallest females were 8 feet 5 inches, and 8 feet 3 inches in vertical height at the shoulder.

Not only did Mr. Sanderson capture an immense number of wild elephants during many years at the work, but he also travelled long distances to personally measure any tame ones whose height was reported to him as being out of the common.

Needless to say, elephants *look* very much taller than they really are; and the first wild rogue which the sportsman, who has never before killed one, may encounter in the jungle, will appear to him as an animal of enormous proportions.

The extraordinarily accurate idea which may be formed of an elephant's height by the measurement of the track of his forefoot, is very useful to the sportsman. Roughly speaking, the animal will be found to measure in height six times the diameter thereof. If therefore a footprint will admit the forearm of a man of a little above average size from elbow to tip of the extended middle finger, the elephant which made it stands about nine feet at the withers.

The brain of this animal is very small as compared with his size, and it lies low and far back in the head. The beginner should, if possible, examine a skull in a museum or elsewhere (in the Colombo museum there is one sawn in halves, showing the brain cavity), and he will at a glance see how small a space the brain-pan occupies in the huge head. After this, he should carefully study the head of a live, tame elephant, and take

imaginary angles to the brain from different points of view.

In order to kill an elephant by the head-shot, it is necessary that the brain should be penetrated by the bullet; if that be missed, very little harm will be done to him, unless if by a very bad shot his jaw should be broken, in which deplorable event the poor creature might die a lingering death from starvation; or except in the case of an animal standing on lower ground than the sportsman and facing him, in which case the bullet might go through the head and into the neck, and so eventually cause death.

It will be seen that what has to be done is first to calculate the spot upon the huge head which the bullet must strike in order to cut its way into the brain, and then to hit that spot. The sportsman must, in fact—often with very little time for calculation—judge the angle to the brain, which varies according to the position of the head, with every motion of the latter, and also with the relative height of the ground upon which the elephant and he are respectively standing, and then shoot with extreme accuracy.

The simplest rule is, I think, to imagine a line drawn through the head from one ear-hole to the other, and then to try to place the bullet so that it will pass just in front of the centre of that imaginary line if the side shot be taken, or through its centre if the elephant be facing directly towards the sportsman.

If the ground upon which both hunter and

quarry are standing be level, and the latter be facing the former with his head held in the normal position, a bullet striking the bump, six inches above a line drawn between the eyes, will penetrate the brain and cause instant death. If, however, the elephant should be standing in the same position, but on a steep slope below the sportsman, the aim must be very high, and of course the converse is equally true. If the elephant's position be exactly at right angles to the sportsman, a shot through the side of the head, in or just in front of the ear-hole, in a line to pass through the opposite ear-hole, or a little in front of the latter, will pierce the brain.

The third typical shot is that behind the ear, which is taken at an angle of about forty-five degrees from behind. The aim should be just above the large bump behind the ear when the elephant swings the latter forwards, and so renders the mark visible.

It is obvious that if the animal's position be three-quarters, half, or one-quarter face on to the sportsman, in place of full face on from the front, or if he be standing not at right angles, but at a greater angle from the side, the lines to the brain are altered, and the necessary calculation and allowance must be made.

The sportsman must always be on his guard against firing too high, and in taking the shot behind the ear, he must be careful to take it at no less an angle than forty-five degrees; otherwise the bullet, if the aim be accurate, will pass in front

of the brain. Similarly, should the angle be greater than forty-five degrees, the aim must be proportionately in front of, in place of *at*, the bump behind the ear. In the case of an elephant charging with his trunk coiled up in front of him and his head held high, the proper aim is at the curled trunk in a line with the brain.

The question, then, which the beginner in elephant shooting must ask himself before firing is, "What spot upon the outside of the head must I hit in order that my bullet may reach the vital spot?" The answer is not nearly so simple as it may appear, since very few men nowadays can get practice enough at elephants to enable them to kill these animals with anything approaching to the certainty which was exhibited by the practised hands of the old days, who received rewards from Government for their destruction.

I have not gone in for shooting elephants behind the shoulder, and the late Mr. Sanderson, after giving this method a fair trial, denounced it as needlessly cruel. I shall therefore confine myself to the usual Indian method of firing only at the brain. Personally, I do not believe that a shot damaging the top of the latter is necessarily fatal—in fact, judging by analogy, I am almost certain that such is by no means sure to cause death, but if shot through the middle or lower portions of that organ, the animal dies instantaneously.

Very frequently a bullet passing through the head very close to the brain, or possibly through the top

of it, floors the creature, who may lie stunned for a short while, or may at once get up again.

The sportsman must be on the look-out for this, and never trust to an elephant being defunct until the fact is beyond all question. Generally speaking, an animal which has been only stunned and floored (not brained) falls quickly and with a loud crash, while one which has been shot dead sinks down slowly and quietly, making very little noise, unless the carcass should crush dry branches or bamboos in its fall.

As soon as an elephant has fallen to the shot, the sportsman should run in close; and if he has any doubts regarding the animal's extinction, should continue firing into his head at an angle calculated to reach the desired spot. The surest sign within my knowledge that a male elephant has been brained, is that, in a very short time after the fatal bullet has been fired, an organ which is usually hidden is extruded, and a general evacuation ensues. Previous to this, I counsel no faith in the creature's demise.

If the elephant be not brained, he will soon begin to struggle, and attempt to rise. Happy, then, is the sportsman who is accompanied by a gun-bearer upon whom he can rely to stand by him with his second rifle or gun; for it is often exceedingly difficult to finish off an elephant which is floundering about and trying to get up! In the last trip which I made after these animals in a zemindary in the Madura district (Southern India) it took a learned (and sporting) judge and myself

all we could do to bag an elephant which had been floored, though I was armed with a double 4-bore and a double 8-bore, and my friend with a double eight, and though moreover the men stood firm. The animal very nearly escaped us, and once, when I was unloaded, he got well on to his legs, and I thought that he was off, but fortunately a useful shot from the judge dropped him again, though he instantly began trying once more to rise. Eventually a bullet from the 4-bore reached his brain, and he was ours.

Elephants are usually found by following their tracks, which is often not so easy an operation as might be imagined. Frequently, if the ground be hard and dry, only really good trackers can follow the trail of a single animal. Generally speaking, unless the object of pursuit should be found between 10 a.m. and 2 p.m. on a hot day—in which case he will be standing nearly motionless in thick cover — the sportsman will hear him breaking branches or bamboos, or flapping his ears, while still some little way off; and directly he does so, he must take every precaution to prevent the animal getting his wind; since, should the taint in the air proclaim, to the brute's sensitive nasal organ, the presence of man, he will either dash off alarmed, or advance to attack. If the hunter should keep the wind in his favour, an approach to within twelve or fifteen paces can usually be made, and this is *the* ideal range for elephant shooting. He should keep on testing the wind when approaching the game, as any inequalities in the ground

may set up a current contrary to its prevailing direction.

Usually there is absolutely no good in attempting to follow an elephant which has got right away from the place with only head-shots. However slowly he may have gone off, his pace will improve as he proceeds, bleeding will soon cease, and he will cover a very long distance before halting. I have only once come up again with a wounded elephant which had got away, and that was an exceptional case, the animal being apparently rendered unusually stupid by my first shot. He was going off slowly, and we could hear him blowing. Presently, I got up to him standing in open bamboo cover, and gave him both barrels of my 8-bore rifle, the second of which nearly caused him to subside; but, discovering us, he cocked his ears and faced us, and would probably have charged, had I not at once given him another shot from a spare gun (8-bore), which sent him off. Though we followed till we were obliged to return to camp which we did not reach till 8.30 p.m., we saw him no more, nor when we went out again to look for him on the next day did we succeed in encountering him.

The best weapon for elephant shooting is, in my opinion, a light 4-bore. Until my last trip in pursuit of this game, I had never used one of the latter upon these animals, but I now think that there is nothing to compare with it for the purpose. I formerly used, first a double 8-bore rifle, and then that rifle in conjunction with a double 8-bore gun,

with my ·500 express, loaded with extra long, solid bullets, in reserve. I wounded and lost a number with my 8-bore, and probably had I used a much smaller weapon should have bagged more than I did.

An 8-bore lacks the handiness of a lighter gun, and does not possess the tremendous power of a 4-bore.

If elephants never charged, probably a 12 or 16-bore rifle would be the best weapon for use upon them; but it would not be anything like as effectual in stopping a charge as is a heavy bullet from a larger bore. My 4-bore is a double-barrelled gun, weighing a little over 18 lbs., *i.e.*, only about 3 lbs. more than my old 8-bore rifle. It is accurate at elephant-shooting range, and is a splendid knocker-down; in fact, a 4-bore bullet seldom fails to floor a tusker, whether the latter be brained or no; and this is a great advantage, more particularly in case of a charge. I use only ten drachms of powder in it, but I believe this allowance to be ample. The gun is hammerless, is fitted with an anti-recoil heel pad, was built by Dixon, of Edinburgh, and cost £42.

I could not desire a better weapon for elephant shooting than the above. Of course I took it in hand only when close to the game.

One caution I must give beginners regarding 8-bores and 4-bores, and that is to get into the habit of invariably firing the *left* barrel first. All the heavy guns which I have had would, if the *right* trigger (*i.e.*, the trigger of the right barrel) were first pulled, frequently let off both barrels

together; but this has *never* happened in my experience in the case of the *left*.

In my last trip after elephants, in the Vursinaad valley of the Madura district before referred to, a female (unwounded) charged my friend and myself, her head coming through the cover only ten paces off, as she rushed at us with ears cocked, after making the short, sharp trumpet "prut! prut!" which elephants generally utter before charging. I had had no big game shooting for a long time, and quite forgot in my hurry to pull the left trigger of my 4-bore. The result was that I pulled the right, both barrels went off, and I was thrown on my back several paces off, but luckily quite unhurt except by thorns. The elephant fortunately was also floored, and was very glad to take herself off after recovering her legs.

The 4-bore is also a capital weapon for use upon bison where the cover is dense, and I would recommend the beginner in elephant shooting, to, if possible, procure a double 4-bore gun similar to my own, and a double 8-bore rifle or gun as a spare weapon, that is, if he is likely to have a good many opportunities of enjoying the sport. If however, as is probable, his opportunities for elephant shooting are likely to be few, an 8-bore Paradox, which would be useful in rhinoceros and bison shooting, would be preferable as an all-round large game weapon.

Theoretically, the number of any given bore means the number of spherical bullets fitting that calibre which weigh one pound avoirdupois. Practically, however, the heaviest spherical bullet which

my 4-bore will carry is only $3\frac{1}{2}$ in place of 4 ounces in weight. This is on account of the thickness of the cartridge case, whose *internal* diameter is less than that of the bore.

A European would have but a small chance of escape by flight if attacked by an elephant on the ground usually frequented by the latter. He would indubitably be caught by thorns or bamboos, or tripped up by branches or fallen canes hidden in the grass; and it is therefore advisable to have a second big gun in reserve, and, if practicable, to engage a man who will stand by his master with it (but who will never dream of firing himself), relying, if attacked, solely upon powder and heavy lead. If unloaded when charged, the sportsman should, if possible, get out of sight behind cover, or into a nullah (if one should be handy), and rapidly reload, and he may then obtain a good chance while the elephant is searching for him, though it is wiser never to be quite defenceless, but to always keep one barrel in reserve in case of accidents, which, with two big guns, can generally be managed.

Elephants often charge upon very slight provocation—sometimes no more than that caused by the smell of man—and females with young calves are particularly liable to do so. I have been charged by quite a small male upon no graver cause than my accidentally trespassing "between the wind and his nobility." I was on the track of bison at the time, and, seeing the elephant at some distance off, went up near enough to him

to estimate his quality, and then finding that he was a little beast with very small tusks, I left him alone, and again took up the tracks of the bison. After we had gone on a short distance, we got to windward of the elephant, when, suddenly, one of the men said in his own language, "The elephant is coming"; and, sure enough, there was the brute coming down on us in full charge; but an 8-bore bullet in the head staggered though it did not floor him, and the precocious and combative youngster executed a rapid strategic movement to the rear, looking very foolish.

All wild animals, but more particularly elephants, should they be suddenly startled, and so led to lose their heads and make a blind rush, are liable to run into, instead of away from, the very danger which they are seeking to evade. I have had a tusker, who had not the slightest intention of charging, rush so straight in my direction, after I had given him both barrels of my 8-bore and was defenceless (the men with my spare guns having bolted), that I had to get out of his way to avoid being accidentally run over.

This happened in the open, and the tusker was a solitary animal, but I have twice in one trip seen herd elephants, alarmed at getting our wind, bolt straight in our direction. I was then accompanied by a good sportsman and pleasant companion (now, alas! no more), the late Brigadier-General A., who had received permission from the Mysore Government to shoot two tuskers. Upon one of these occasions we had gone out after bison, and were

on our way through the forest, when we came across a herd of elephants feeding in a valley. We did not interfere with them, not wishing to shoot animals in herds. The General, moreover, had shot his two tuskers (one with a single bullet and the other with my aid), so we continued our course down the valley. When we had put, perhaps, two-thirds of a mile between ourselves and the herd, we got into the wind of the latter, and saw them stampeding in the opposite direction. We walked on, until, all of a sudden, a crashing down the hill-side above revealed the fact that the animals were rushing straight upon us. On our right, in the direction from which the elephants were coming, stood a thick bamboo clump, and to this I took the General and the men, and we stood behind it to let the elephantine avalanche sweep by.

The herd was steering to pass the clump on our left, but one cow came round on the right and pulled up and faced me. She was so close that her head was within three or four feet of the muzzle of my rifle when I levelled it. There was no time to ask her further intentions, and, moreover, we were between her and her companions, so I shot her dead.

I was very sorry to have been obliged to shoot a cow, but under the circumstances it was inevitable.

Upon the other, and previous occasion in the same trip, a friendly tree was our shelter, and the herd, which had got our wind, filed past on our right within a few paces, and without seeing us.

Had there been a shootable tusker in it, this would have been a grand chance for the General, who had not, when this incident occurred, bagged the two elephants, to shoot which he had permission; but the herd was a small one, and the only male in it was not fit to shoot and was therefore allowed to pass unscathed.

It is a curious and unaccountable fact, that, while mucknahs are the exception in India, a tusker is an exceedingly rare animal amongst male elephants in Ceylon.

Female elephants have no tusks, only short tushes which are generally broken off before the animal arrives at middle age. I cannot understand how Doctor Jerdon's book, *The Mammals of India*, can contain this astounding statement in his description of the Indian elephant, "tusks large in the male, small in the female."

The fact is that while the tushes of the female elephant are mere superficial prongs, only a few inches long, and placed nearly vertically, the tusks of the male are deeply embedded—usually for about half of their total length—in sockets of bone which terminate only just below the eyes.

Tusks vary greatly in length and thickness; sometimes one is altogether wanting, and usually where both are present, one is shorter and more worn by use than is the other.

An elephant with an enormous tusk was bagged in 1863 by Sir Victor Brooke and Colonel Douglas Hamilton in the Billiga Rungun hills in Mysore. This animal had but one perfect tusk, the other

being broken off short and much diseased. The sound one measured 8 feet in length, of which 2 feet 3 inches was embedded in the socket, while the portion showing outside taped 5 feet 9 inches; its greatest circumference was nearly 17 inches, and its weight 90 lbs. The other (broken) tusk showed but 15 inches outside the socket, and 2 feet 1 inch of it in length were embedded, yet it weighed 49 lbs.—even this latter being a great weight for a single tusk of an Indian elephant. Rowland Ward quotes 102 and 97½ lbs. respectively as the weights of the tusks of King Thebaw's sacred white elephant.

I have never personally bagged an elephant with tusks exceeding 63 lbs. the pair, and this was the first which I ever shot; but two very large tuskers were killed in Mysore by friends out in camp with me. One of these was bagged by Captain (now Colonel) W. (late of the 43rd Regiment), and I append the measurements and weights of the tusks.

	Length. Inches.	Greatest girth. Inches.	Weight. lbs.
Right tusk	69¼	16½	63
Left „	67	16¾	60

Weight of the pair, 123 lbs.

The other was shot while we were out together, and with my rifle, by Captain (now Colonel) B. of the Gunners, and was the first elephant at which that good sportsman had ever fired. His tusks measured and weighed as follows:—

	Length. Inches.	Greatest girth. Inches.	Weight of the pair. lbs.
Right tusk	86	16¾	127
Left „	88	17 (over)	

A very large pair of tusks was bagged many years ago in the Vursinaad Valley, Madura District, by Mr. Fischer of Madura, which measure—

	Length. Inches.		Greatest girth. Inches.
Longer tusk . . .	72	...	18¼
Shorter tusk . . .	66	...	18¼

and weigh 72½ and 70 lbs. respectively, or 142½ lbs. the pair. I personally measured and weighed all these three last-mentioned pairs, and can vouch for the accuracy of the measurements and weights.

Elephants, in common with bison and deer, appreciate salt in wet weather, and they therefore frequently visit salt-licks in the monsoon; and sometimes, when one of the latter is situated in a nullah, a good idea of the size of the tusks of an elephant which has visited it may be obtained from their impressions in the soft earth of the bank.

A similar approximation may also be sometimes made if a place in which the elephant has lain down to sleep should be found, provided only that the soil be sodden—as is usually the case during the monsoon, which is by far the best time for elephant shooting in Mysore.

It is, owing to the restriction before mentioned, by no means easy to advise a sportsman who may wish to shoot an elephant how to obtain the required permission.

Before the Mysore Government reintroduced the capture of elephants in kheddahs, leave to shoot a tusker was often granted upon application; but now that the same are working, it would, in the absence

of powerful interest in high places, probably be refused, unless a really troublesome "rogue" should prove dangerous to human life, or habitually destructive to property.

After an elephant has been bagged, the tusks must be taken out as soon as possible, unless, indeed, time be no object, and where there is no danger of their being stolen if left, in which latter event they may be left in the carcass and drawn out after decomposition has loosened them, some ten or twelve days later. In extracting the tusks, the skin and muscles covering the tusk-cases must be removed, and the latter split up with a small axe, great care being taken not to break the thin uppermost portions of the trophies. The latter must then be emptied of the red pulp which fills their hollow portions, and be thoroughly washed. In packing for travelling, to prevent breakage, the thin upper portions may be filled each with a large plug of wood which just fills the cavity. Each tusk may then be completely enveloped in straw ropes tightly and closely wound round it and secured with string.

If it be desired to preserve the feet, which make very nice trophies, they should, as soon as possible after the animal has been bagged, be cut off at the required height—say 18 or 20 inches—and men at once set to work upon them. Two men should be told off to each foot, and they must, with sharp knives, remove all the flesh and bones right down to the gristly sole, and then pare the latter down as thin as possible. This done, and the skin thoroughly cleansed of all adherent muscle and

other matter, the inside of the skin, and the sole, right into the interior of the toe-nails, must be well coated with arsenical soap (which should be obtained in India, *not* in England), after which the foot may be filled with dry sand well rammed in; and after the whole of the outside of the skin has been painted over with arsenical soap, it may be daily put in the sun to dry, the sand being often rammed in to keep the skin extended. When partly dry, the sand may be removed, another inside coating of arsenical soap given, and the skin folded down as much as possible to reduce bulk, and again put in the sun till quite dry and hard.

Great care must be taken in using arsenical soap. The sportsman should on no account allow a servant either to apply it, or to handle anything which has been coated with it. He must personally apply this poison, and personally handle the trophies to which he may apply it, carefully cleansing his hands after he has touched any such. He must, moreover, be very careful, should he have a cut on one of his fingers, that not a particle of the preservative touches that spot. Arsenical soap should be kept locked up in a box of which the sportsman himself keeps the key. Elephants' fore-feet make handsome footstools, and they can also be fitted with internal divisions and lids, and made into liqueur cases, etc.

The hill ranges of the native state of Travancore abound in elephants which are very destructive, and formerly, if leave to shoot one or two tuskers was applied for, it was granted. Recently, however,

the Travancore Government has not been so liberal in this respect, though it seems probable that as the planting industry upon those hills is advancing by enormous strides, the complaints of the planters regarding the damage done by elephants may induce the Government to grant occasional permission to shoot a few tuskers.

In jungles owned by private individuals, leave from the proprietor is all that is required, but there are not many such in which elephants exist, the zemindary of Guntamanaikanur, in the Madura district of the Madras Presidency, being a notable exception.

The vernacular names for the elephant are—

Hindustani—Hati.
Bengali—Gaj.
Tamil, Telegu, Canarese, and Malabari—Anay.
Burmese—Shanh.

CHAPTER XIII.

EPISODES IN ELEPHANT SHOOTING

A MAN-KILLING MUCKNAH

I CERTAINLY began big game shooting at the wrong end, *i.e.*, before becoming a steady shot by practice at black buck and spotted deer, etc.; I had virtually to commence with elephants and bison. The result was that I failed to bag many animals which would certainly have been mine had I sown my wild oats of over-anxiety to bag, and keenness, upon more commonplace and less exciting game.

The first occasion upon which I ever saw wild elephants was in Assam, and by moonlight. One night, after dinner, I was told that they had invaded the tea estate on which I was then working as assistant-manager, and that they were near the tea-house. Taking an 8-bore rifle, I went out to look for them. Just behind the tea-house, when I got near to the latter, I saw some shadowy sterns disappearing in the gloom, and hastily pitching and pulling, I fired at one of them, and accelerated the retreat of the trespassers.

I then went to bed, and had fallen asleep when I was awakened by a man who told me that the

elephants had returned. Fringing the tea, was a narrow belt of jungle and bamboo, and beyond it lay low ground covered by a great sea of high reed and grass—at that season standing in water. I went out again, and could hear the elephants in the narrow belt, and, approaching the sound, sat down behind a tea bush to await the appearance of one of the animals. Before long the head of a tusker emerged from the bamboo, and I fired at his temple. A great crushing in the jungle ensued, followed by a tremendous splashing, squelching, and popping, as the elephants floundered through the wet, muddy swamp full of high reeds and grass, accompanied by the tusker, who was little, if any, the worse for the scare which he had experienced.

The next occasion upon which I fired at an elephant was shortly after I had joined the Mysore Forest Department. I had at the time never bagged a single head of running game bigger than a jackal.

In January, 1882, I left Mysore with H., of the Forest Department; and upon the fifth day of our trip I met with an adventure which nearly brought my big game shooting days to an abrupt conclusion ere they had well begun.

H. and I had been encamped in tents in the Metikuppa forest. The water supplies in the interior of that forest had nearly all dried up, and our camp was pitched beside a filthy pool, from the mud beneath which, if a stick were thrust down into it, bubbles of gas arose to the surface. Fortunately H. had brought a cask of good water mounted

on a cart, and we had plenty of soda-water with us. Frequenting this, and the adjoining forest of Karkenkotta which is bounded on the south by the Cubbany river, was a large and dangerous rogue elephant, a mucknah, who had killed several people, and whom, in the interests of forestry, it was advisable, if possible, to destroy.

He was not then in the Metikuppa forest, as we soon ascertained, so on the 27th January we moved camp to Karkenkotta, marching through the jungle in the hope of finding tracks of the rogue *en route.*

In this we were successful, for we came upon the fresh tracks of a large single elephant. H. and I dismounted from our ponies, and sending the men who were loaded with camp requirements on to Karkenkotta, and accompanied by Kurrabas to track and to carry our spare guns, ammunition, etc., we set off to try to find the rogue. The forest consisted of high timber, now bare and leafless, alternating with bamboo of different ages, the youngest forming dense thickets, and the mature an open jungle of large clumps, with clear spaces between. So hard and dry was the ground, that tracking was very difficult, and after a good deal of very arduous and hot work, we lost the tracks. The men were quite at fault, but making a détour, they struck a nullah, in the now almost dry bed of which a little water still lingered in the deepest pools. Their judgment proved correct, for here again we found the tracks, and ere long we came upon hot dung, so that we knew that the object of our pursuit was now very near to us, and a little further on we

heard a crashing of bamboos. Thinking that the elephant had discovered us and was running away, I took the 8-bore and ran up, in order to, if possible, intercept him, when, to my surprise, I saw the rogue standing beside a bamboo clump, in high open jungle, on a gentle slope above me. The dry, crackling leaves which strewed the ground made noiseless progression impossible, even to a Kurraba, and there was no cover beyond sparsely scattered bamboo clumps. Half running and half walking, I closed in quickly and alone, the elephant meanwhile standing facing me, and apparently staring at me. About twenty-five or thirty yards from him, a thin, dead trunk leant at an angle of about forty-five degrees. It occurred to me that this might be useful as a breastwork in case of a charge, so I pulled up behind it, and aiming at the elephant's forehead, I fired. Both barrels went off simultaneously, owing to my having pulled the right trigger, and the elephant, after tottering for a few seconds, fell over with a crash like that of a falling tree. He lay prone, only slightly and convulsively moving his legs. H. then joined me with the men, and I reloaded and went in nearer to the elephant, who began to struggle and try to rise. H. thereupon fired both barrels of his ·577 express, and ran away, the men with my spare guns and cartridges following suit. I got back to the leaning trunk and waited until the elephant had finished floundering about and had regained his legs, when I again fired at his head; and once more both barrels went off, whilst the animal stood, swinging slightly from

side to side, and looking very shaky. I had but two more cartridges left in my pocket, and I now put these into the rifle, and fired again. For the third time both barrels went off, and immediately after the report the elephant came down upon me. I was now quite defenceless, and had to run for it, which I did obliquely, turning a bamboo clump, round which, to my horror, the rogue followed me. I then set off at my best pace down the most open glade which I could see, the elephant gaining on me at every stride, when I suddenly saw H. standing behind a bamboo clump, whose shelter he had gained after he ran away upon the elephant's attempting to rise. I thought, of course, that he must have reloaded, and making a final effort, I reached the clump, with the elephant almost on my heels, and turning it sharp, pulled up beside him. The elephant stopped for a moment, H. said, and twisted his trunk about to smell, but fortunately he had received sufficient punishment; for, having lost sight of me, he went on at a great pace, and crossed the frontier into Coorg. H., I found, was still unloaded, and he told me that his cases had stuck, so it was lucky that the rogue did not prosecute a search for me. I was somewhat amused at H. asking me (rather indignantly) what I had come to *his* clump for!

Now here was a case in which, in my ignorance and inexperience, I had made a great mess of it; but then it should be remembered that had I killed that rogue, he would have been *my first head* of big game, as I had not then bagged even a deer or an antelope.

In the first place, I was in error in supposing that the animal was staring at me before I fired at him, and in firing hastily in consequence of that supposition. Then, directly the elephant fell, the crash with which he came down should have led me to suspect, had I had experience, that he was not brained, while the moving of his legs as he lay would also have afforded conclusive proof of this fact. I ought, of course, to have gone up to within twelve or fifteen paces before firing, and, having floored the elephant, to have run in close to his head, and endeavoured to brain him before he could regain his legs.

After this I wounded and lost several elephants, and it was not until the 24th August in the same year (1882) that I succeeded in bagging my first.

MY FIRST ELEPHANT

In the Berrambadie forest in Mysore, I was following up a herd of bison, out of which I had already bagged one, when I saw an elephant walking rapidly along in front. The wind was right, and I followed him, waiting for a chance. Presently I heard the Noogoo river in front, and felt sure that the elephant would halt there, nor was I disappointed, for, on topping the bank, I saw him standing in the stream, and throwing water over himself. I took the shot behind the ear, and the elephant fell, but was not shot dead, for he tried to recover his footing, and as his head bobbed past me

(the rest of his body being under water) I fired both barrels of my 8-bore down into it. A jet of blood spouted forth at each shot, and I hastily reloaded, whereupon, as the elephant tried to get up the bank, just in front of me, I brained him. He sank back, some bubbles rose from the tip of his trunk, and I had bagged my first elephant. I had shot a bison and an elephant before 12 o'clock!

I was terribly afraid that the river might rise during the night and the carcass be carried away, so I sent for stout ropes, and had it securely fastened to trees. Cutting out the tusks was, under the circumstances, a work of great difficulty, and it took a large number of men procured the next morning, and working hard from then until late afternoon, to extract them. I was obliged to abandon all idea of preserving the feet. The tusks of this elephant showed about 2½ feet outside of the gum, and when extracted proved to be respectively 4 feet 10 inches, and 4 feet 11½ inches in length, and 15 inches in greatest girth. They weighed 63 lbs. the pair.

In 1883 I bagged three elephants. The shooting of the first two was unaccompanied by any incident worthy of relation, but that of the third was somewhat extraordinary.

THE VANISHED ELEPHANT

A friend, W——e, who is short-sighted and uses an eyeglass, was in camp with me in the Mysore district, intent on shooting.

We had just marched from Rampore to Kalkerra in the Ainurmarigudi forest, when the news was brought that a tusker had been found for us only three miles off. We proceeded to the place, and saw the elephant in the distance.

W——e now asked me to halt for a few minutes while he mopped his face, and wiped his eyeglass, which had become misty from perspiration. Then we advanced, but the elephant was no longer visible, and we went cautiously, closer and closer, until I wondered what *could* have become of him—still not a sign of him did we see. When we had viewed him, he was moving about in a nullah in which there was much high reed, but now he was quite invisible, and appeared to have vanished into thin air. At last, just in front of us, we saw the elephant lying on his side in a swampy place, his head pillowed on dry ground on our side. We got up to within *less than five paces*, and then W——e fired. At the shot the elephant got up, and as he was crossing our left front in a great hurry, I dropped him dead by the temple shot.

THE INSANE TUSKER

An extraordinary adventure occurred in the case of Colonel and Mrs. G., who were in camp with me in the Berrambadie forest in 1884. In that year I had made all arrangements for catching elephants in a kheddah in a pass under the Billiga Rungun hills. Most unluckily the rains failed, there was no fodder, and I had great difficulty in providing food for the few tame elephants which had been placed at my disposal for the work. It was most annoying. I had taken a great deal of trouble, and had constructed a large enclosure, with a small one for roping opening off it, and all was ready, even to the gate of the latter (well studded with sharp nails on the inside), which was lashed up ready for use. It was so arranged that, after the entrance of the elephants, one stroke from an axe or chopper, severing a rope, would cause the gate to fall into position, and effectually cut off all retreat. I had imported jute, from which large numbers of elephant ropes had been made, and nothing was required but the advent of elephants into the vicinity of the kheddah. As I have said, however, when the time for the latter to appear had arrived, the rain had *not*, consequently there was nothing to induce them to come into the low-country jungles.

Sick and tired of continued disappointments and enforced inaction, I decided to move the tame

elephants into the Berrambadie forest, where there was, I heard, more grass, rig up an impromptu kheddah there, and try to capture at least a few animals.

I was in camp at Moluhollay, where, as I have mentioned, Colonel and Mrs. G. came for a few days, in order that the former might try for bison.

Even here the grass which had sprung up had withered, and the ground was hard on account of the drought.

I set to work in real earnest, selected a suitable spot, and got a stockade ready. One day, when I was going out on this work, I suggested to Colonel G. to take his wife on one of the tame elephants and show her the forest, and he did so, the lady riding a very large tame tusker. On my return to camp from work in the evening, some Kurrabas, who had been out with Colonel G., came from him to tell me that a wild tusker had been for a long time, and was still, following the tusker on which Mrs. G. was mounted. The situation appeared to me to be a very perilous one for the lady. The Kurrabas said that the wild elephant wanted to fight with the tame one, and indeed, apart from that hypothesis, it was not easy to understand the wild animal's object in following a *tusker*. The men told me that the Colonel wanted me to bring tame elephants and ropes, and to try to secure the intruder. Taking my 8-bore rifle, and passing through the space in which the tame elephants were picketed, I gave the necessary orders, and then went on to join the Colonel, whom

I met quite close to the camp. The sight was a very strange one. First came the tame tusker carrying the lady; next the Colonel, rifle in hand, on foot with the men; and last of all, walking sedately and quietly behind, followed the wild tusker at a distance of only some thirty yards from the tame elephant.

Directly afterwards, the tame females met us, and the wild tusker became uneasy, and went off a little way. I then sent two females to attempt to lead him away, while Mrs. G. on her tusker went to her tent. The wild animal, after some hesitation, followed the females, and I kept close behind him, determined, if he should attempt to escape, to shoot him, since there was very great danger lest he should return at night and attack the tame elephants at their pickets. There was also no certainty as to what so strangely behaved an animal might, in a nocturnal visit, do to the tents, so I had fully made up my mind to catch him if possible, and, failing that, to shoot him.

There had been no time for any preconcerted plan. The only thing to be done was for the tame females, avoiding the camp, to lead the tusker into the kheddah, where he could be at once secured.

The idiots of mahouts who were riding the tame females led, however, straight towards the camp, with tents, horses, servants, etc., around, and the tusker began to make off. I ran up to try to turn him, but he held on, increasing his pace, and just as I had reached the high road which the elephant crossed, and as the latter, going at speed, was

about to enter the jungle on the other side, I dropped him by a lucky shot behind the ear, and with two more bullets killed him. This elephant appeared to be mildly insane. He had followed the same tusker for hours, taking no notice of the Colonel and the men on foot, though he must often have got their wind. The men on cutting out his tusks found seven or eight huge maggots in his brain, and it is possible that the presence of these irritating pests might account for this animal's extraordinary behaviour.

A FIGHTING TUSKER

In 1882 Captain (now Colonel) W. (late of the 43rd Regiment) was in camp with me at Bandipur, and one day a brother officer of his, who had done very little shooting, and who had never seen a wild elephant, joined us. Next morning W. and his friend went out together and came upon the tracks of a large, solitary male elephant. They followed them up to the Mysore boundary, and then, finding that the elephant had crossed into her Majesty's territory, where W. had no permission to shoot him, the latter sent one or two jungle men round to give their wind to the animal in the hope of driving him back into Mysore. This stratagem was successful, and the elephant returned. W.'s battery consisted of a double ·577 express rifle, taking a charge of 6½ drachms of powder, a double ·450 express, and an old, though accurate, single 6-bore muzzle-

loading rifle carrying a belted ball, while his friend was armed with a double 12-bore rifle.

The elephant became very uneasy before W. had got in as close as he wished to do, and he had to fire hurriedly with the ·577; the single 6-bore being behind, and not within reach at the time. Away went the elephant, with W., who had given him both barrels, in hot pursuit, reloading as he ran. As soon as he got fresh cartridges in, he fired one barrel behind the ear, but without effect; and then, as a last chance, he directed the other bullet at the elephant's leg. He was just putting in fresh cartridges after this shot, when he heard the short, sharp war-trumpet of the tusker, and saw the latter, with trunk coiled up and ears cocked, charging straight back at the cloud of smoke. There was no big tree behind which to step, so W. took a couple of strides to one side behind a sapling, and gave the elephant the contents of one barrel in the face, and a bullet from the other in the ear, as the tusker brushed past him so close that W. said he could have struck him. Most fortunately, the enraged brute, failing to see W., went on, "going for," and severely punishing, a bamboo clump, behind which his friend and the men, who had, however, escaped from it long before the tusker got there, had been hiding.

W. then followed the elephant up, and he found that the leg shot had deprived him of all travelling power, for after punishing the bamboo clump, he struck off at an angle, and came to a halt in a thicket. W. then discovered that the caps for his

big gun had, by an oversight, been left at home, and that there was only the one cap on the nipple of the loaded piece. He obtained some small caps, however, from his friend's 12-bore cartridges, and by cutting these open, he got them to fit the nipple of the 6-bore.

A great fight then ensued. W. used his own weapons and also his friend's rifle, and he gave the elephant, who charged twice more—but not *home*—many shots, until at last a ball from the big gun, the third which he had fired from it, laid the tusker low. The elephant was of the largest size and very old, and his tusks (the measurements of which are given in the preceding chapter) weighed no less than 123 lbs. the pair.

GRAND TROPHIES

In July, 1886, I was in camp at Karkenkotta, on the road from Mysore to the western coast, with Captain (now Colonel) B. of the Gunners. B. had never fired at an elephant, nor had he a weapon fit for the purpose, though he had obtained permission to shoot one. I had leave to shoot "rogues" only, and one of these was reported as frequenting the Karkenkotta forest at the time. It was therefore arranged that we should go out together, and that I should endeavour to bag the rogue, while B. should try for any other tusker.

On the morning of July 7th I sent out men in pairs in different directions to try to find the rogue, and news that he had been discovered having

reached camp, B. and I went out. The elephant was, however, very badly placed, and he discovered us before I had got well up to him, and a hastily fired shot failed to stop him.

We then went on the tracks of another single elephant, which we followed for a long distance. At last we knew from the signs that the quarry could not now be very far ahead, and we soon saw him moving slowly across our left front. I saw no tusks, and whispered to B.—to whom I had allotted my 8-bore rifle, while I retained my gun of similar bore in case of emergencies—to take care that he was not a mucknah, and B. replied, "No, I can see his tusk." The next moment, I saw a foot or so of thick tusk, the rest being hidden in the grass. B. put up the rifle, took a steady aim, and fired, and down went the tusker. We ran in to his head at once, and, by my advice, B. gave him two or three more shots to make sure, but I believe that he was a dead elephant when he fell.

His tusks were a truly magnificent pair, weighing 127 lbs., and their measurements are given in the previous chapter. So long and incurved were they, that one overlapped the other at the tips.

A STUNNED TUSKER

As an instance of the advisability of making quite sure that an elephant is really dead, I may quote an experience of Colonel—now Brigadier

General—P. C. (of the Coldstream Guards) who was shooting in Mysore. He had floored a fine tusker which he believed had fallen dead, and was admiring his prize, and patting his shikarrie on the back in his delight at his triumph, when the latter suggested that his master had possibly better reload. Before he could do so however, the elephant recovered his legs, and, despite the Colonel's efforts to detain him, made good his escape.

A LUCKY CHANCE

Although elephant shooting frequently entails much hard work before the game is encountered, it sometimes happens that the sportsman chances upon a tusker very unexpectedly. I well remember, many years ago, bagging a tusker when out for an evening stroll in search of spotted deer behind the travellers' bungalow of Karkenkotta in Mysore, but, as is so often the case in elephant shooting, there was nothing remarkable attending the circumstances of his death beyond the luck of the *rencontre.*

I have personally shot, and have assisted friends in shooting other elephants at various times, and have had considerable experience of the sport, though I have (alas!) drilled holes through the heads of a good many of these animals which have escaped, and I regard elephant shooting as a very difficult branch of sport, and also as a highly exciting amusement.

CHAPTER XIV.

THE DEER OF INDIA AND THE HIMALAYAS

THE deer of India and of the Himalayas consist of the following species :—

1. The sambur (*Rusa Aristotelis*).
2. The spotted deer (*Axis maculatus*).
3. The hog deer (*Axis porcinus*).
4. The swamp deer (*Rucervus Duvaucelli*).
5. The Cashmere stag (*Cervus Wallichii vel Cashmirianus*).
6. The Sikkim stag (*Cervus affinis vel Wallichii*).
7. The brow-antlered, or Eld's deer (*Rucervus vel Panolia Eldii*).
8. The muntjac (*Cervulus aureus*).
9. The musk deer (*Moschus Moschiferus*).
10. The mouse deer (*Meminna indica*).

THE SAMBUR (*Rusa Aristotelis*)

This fine deer is, on account of his very wide distribution, entitled to the premier position amongst the many members of his tribe in India. Standing, as he does, some thirteen to fourteen hands in height at the shoulder, with a fine, full,

shaggy mane enveloping his neck and throat, he looks truly a noble animal as with long, widely spreading horns, he stalks proudly in the midst of his seraglio ; or at times when, a bachelor's life possessing greater charms for him, he emerges alone at eventide into a forest glade, or on to some grassy slope, from the dense cover in which he loves to dream through the hot hours of an Indian day.

In colour he is dark brown, with yellow on the chin, on the inner surface of the limbs, under the tail, and on the buttocks, the hinds and young stags being of a lighter hue.

The sambur is found in all large forest tracts and upon all considerable hill ranges, from well within the Himalayas, to the extreme South of India. He affects impartially both hill and plain, and is equally at home in both.

The normal horns of this species have each but two points on the top and one brow-antler, but occasionally additional points occur. The stag does not grow his full number of points until he is four years old, and his horns require to increase for at least three or four years after that age before they will be worth bagging. Once the latter have attained their full development, they are, with but rare exceptions, shed annually in the spring with remarkable simultaneity. By about October or November in most localities, the new horns have been rubbed free of velvet, and then the rutting season begins.

Upon one occasion in Mysore I killed, by a running shot, a large sambur stag who was so near

shedding, that, as he rolled over once or twice on the hillside on which he fell, one of his horns came off from the pedestal of bone. At another time I stalked a fine stag upon the Nilgiri hills, until, upon arriving within very close shot of the animal, I found that he had but one horn having shed the other, whereupon I contented myself with throwing a stone at him.

Sambur may be bagged by stalking in the hills, and by still hunting in the plains, as well as by beating covers in case of both.

I have enjoyed capital sport when stalking sambur upon the Koondahs (the higher ranges of the Nilgiri hills in Southern India); the only drawback to it being the fact that the big stags, where they are much hunted, become almost nocturnal in their habits, and so can be found in a position for a stalk only very early in the mornings and late in the evenings.

The best plan is to start before daylight, the shikarrie carrying a lantern (which may also be useful for the return to camp at night should the sportsman be kept out late). When no longer required, the lantern can be deposited at any point which it is certain will be traversed on the way home. Then, as dawn is breaking, the point of vantage whence the sportsman hopes to view a stag should be reached, and as the light increases the telescope must be brought into play, and all the grassy slopes and valleys outside any covers within sight examined, in the hope of finding a stag out feeding. Should one with a head worth

bagging be viewed, the next thing is to try to stalk within shot before the animal retires to cover for the day, and in this, particularly if the stag should have been discovered a long way off, or the wind necessitate a long détour, frequent failure may be expected. The morning stalk over, deer will not again become visible till the afternoon, but upon the Koondahs and other hill ranges in the south, the intervening time may be pleasantly spent in looking for, and in stalking if found, that fine wild goat known to sportsmen as the "Neilgherry ibex."

In all hill stalking, the wind is the factor which requires the most careful study. The multiplicity of gullies, and the general configuration of the ground often set up very eccentric currents, which, though running in a totally different direction to that of the general course of the wind at that time, will, should the sportsman get into one of them, infallibly betray his presence to the game, and not only render his stalk futile, but seriously frighten, and render even more cautious for the future, an already sufficiently wary and cunning animal.

In stalking a stag, it is a great advantage, in all cases in which it may be practicable to do so, to keep him in view as much as possible during the approach, so that, should he change his position, the sportsman as he draws near may be aware of the animal's whereabouts.

As far as possible, the stalker should keep well above his quarry, avoid the sky-line, remain motionless should an animal raise its head until it resumes

grazing, and take advantage of all cover which may be available. By keeping well above a stag, and by advancing only when the latter has his head down in the act of feeding, it is wonderful what bare ground the sportsman may often traverse without detection if only he keeps the wind in his favour.

In the low-country forests of Mysore, it is but seldom that a sambur stag in hard horn offers the chance of a shot. The reason for this is that it is only during the monsoon (or rainy season) that noiseless progression is possible in those forests, the dry leaves strewing the ground (which crackle "like tin boxes" when trodden upon), rendering it impossible at other times to get near game without being heard by the latter long before there is any chance of seeing it, or of obtaining a shot. Now it is precisely during the time when game can be approached with facility in the Mysore forests that the stags are out of horn (and therefore not worth shooting), so, except in hilly country, or by beating, a sambur's head worth shooting is seldom bagged, or even *seen* in those forests, though fine heads exist there. Of course, in flat forests, the only chance of obtaining a shot at sambur is for the sportsman to move about as quietly as possible, endeavouring to catch sight of the deer before they have detected his presence.

Sambur are supposed to drink only every third day, though in so well-watered a country as Mysore I have had no means of personally testing the accuracy of this dictum.

In length of horn, the heads from the North-West and Central India show a marked superiority over those from the South. Horns up to 46½ inches in length (Rowland Ward's *Horn Measurements*) have been bagged, but upon the Nilgiri hills a 36-inch head is nowadays very rare.

Sambur venison is, in my opinion, quite worthless, but the tongue is good, and I have even tasted good soup made of the meat.

These deer form a favourite item in the tiger's menu, and many a fine stag falls a victim to the jungle tyrant. A planter, on the Billiga Rungun hills in Mysore, once had the luck to be in just after the death in this way of a stag with a fine head, and to bag the tiger on the spot.

Sambur-leather is soft and pliable, and is very useful in making leggings, cartridge-belts, cartridge bags, etc.

Noted localities for this deer are the Sewalik hills and the Terai in the North, the forests of Central India, the Nilgiri hills, and the Eastern and Western Ghauts.

Sambur are tough animals, and I prefer the large canelured ·500 express bullet for use upon them.

The vernacular names for this deer are—

Hindustani—Sambur.
In the Himalayas—Jerai and Jerao.
In the Terai—Maha.
Mahrathi—Meru.
Gondi—Ma-oo.
Canarese—Kadavi.

Telegu—Kannadi.

Burmese—Schap.

In Eastern Bengal — Ghous or Gaoj, female Bholongi.

THE SPOTTED DEER (*Axis maculatus*)

This, one of the most beautiful animals in existence, is also one of the commonest of the larger Indian *feræ naturæ*. There is no more pleasing sight, which the heart of a sportsman can desire, than a herd of spotted deer grazing and browsing, ignorant of danger, in some lovely forest glade in the early part of the monsoon, when forest nature has donned her brightest attire, and when the fresh, new grass rivals the emerald in hue. Should there be in the herd a stag with horns of more than average size, the sportsman must be *blasé* indeed whose heart does not beat the faster when he beholds him, and if a novice, he is very apt to miss altogether from sheer excitement; for he covets those splendid horns, as well as that dappled hide, shining like burnished gold flecked with snowflakes, in the rays of the morning sun, which has, for the nonce, dispelled the monsoon clouds, and is shining forth in glory to add the one finishing touch required to complete a picture of loveliness almost too consummate for earth. At the shot, the scene is changed; a few glimpses of dappled forms fast disappearing in the forest, and the deer have gone;—all, that is, except the big stag, who, if the aim was true, will probably be found lying dead either upon the spot, or within

about one hundred yards, though for the moment, he too has vanished. Nature's setting still remains, radiant as before, but the gems have disappeared from it, and with them much of the beauty of the panorama.

The height of the spotted stag at the shoulder is from 36 to 38 inches. Although the bright chestnut ground-colour, thickly studded with spots of snowy white, would seem to be sufficient adornment, nature has added other diversities of colouring to complete the elaborate attire of this singularly ornate animal. A very dark streak runs from neck to tail, the muzzle is dark, the throat white, the ears brown, the tail long for a deer, and white underneath, the under parts also being whitish.

The horns, like those of the sambur, have each (normally) but two points on the top and a brow antler, but small abnormal points are not unfrequently thrown out from the base of the last. A stag with 30-inch horns is worth shooting, but fine heads are to be had up to 36 or 37 inches in length.

The horns are shed, probably annually, but without any regularity whatever, stags in hard horn, in velvet, and without horns being found simultaneously.

The spotted deer is widely distributed throughout India, but is not found to the east of the Bay of Bengal, nor in the Punjab. It is somewhat local, but occurs in suitable localities from the foot of the Himalayas to the extreme south of the continent, and is very partial to well-watered forests. Its proper habitat in Mysore and Malabar is the lighter

belt of jungle between the large timber forests and the cultivation, but I have often, when in pursuit of elephants and bison in the heavy forests, met with and shot this deer in the latter.

In the south, spotted deer are bagged by noiselessly searching for them in open glades and likely feeding-grounds in the mornings and evenings—"still-hunting," in fact—but in the north, where the height of the grass and reeds renders shooting on foot impracticable, the animals are usually shot from elephants.

When spotted deer are somewhat alarmed, yet not sufficiently so to cause them to seek safety in precipitate flight, they often keep up a loud, shrill bark which can be heard at a considerable distance. This call frequently denotes the presence in the vicinity of a beast of prey, and it is well worth the sportsman's while to approach a barking animal in the hope of catching sight of the striped or spotted (as the case may be) disturber of the sylvan peace.

The vernacular names for this deer are—

Hindustani—Cheetul, Chitra.
Bengali at Rungpore—Boro-khotiya.
In Gorukpore—Buriya.
Canarese—Sarraga, Jate.
Telegu—Dupi.
Gondi—Lupi.

THE HOG DEER (*Axis porcinus*)

The only place in which I have seen this deer is Assam, where, as in Burmah and in parts of Bengal and the Terai, it is abundant.

Jerdon's description of it runs thus:—"General colour a light chestnut or olive-brown with an eye-spot, the margin of the lips, the tail beneath, limbs within, and abdomen white. In summer many assume a paler and more yellow tint, and get a few white spots; and the old buck assumes a dark slaty colour. The horns resemble those of a young spotted deer, with both the basal and upper tines very small, the former pointing directly upwards at a very acute angle, and the latter directed backwards and inwards nearly at a right angle, occasionally pointing downwards."

"Average length of a full-grown buck, 42 to 44 inches from muzzle to root of tail; tail, 8; height at shoulder, 27 to 28 inches; average length of horns, 15 to 16 inches."

The hog deer is not found in Southern India, but is abundant in the north, and in Bengal. Its habitat is high grass, and it is usually shot from elephants. Unlike most of the deer tribe, this species is not gregarious.

The horns are shed in spring, and the new ones attain their full growth by the autumn.

The vernacular names for this deer are—

Hindustani—Para.
In Nepaul terai—Khar-laguna and Sugoria.
In parts of Bengal—Nuthurini-haran.

THE SWAMP DEER (*Rucervus Duvaucelli*)

This fine deer stands about eleven or eleven and a half hands in height. It is, in winter, of a dull yellowish-brown colour, changing to chestnut in summer, with the under parts at all seasons white. The does are lighter in colour, and the fawns spotted.

Swamp deer are found in forest tracts at the foot of the Himalayas and in Nepaul, are very abundant on the Brahmaputra churs (islands in the river) in Assam, are found in large herds in open, park-like country, and in the saul forests in various portions of Central India, and occur also in the eastern Sunderbunds of Bengal.

In the Dehra Doon, the Nepaul Terai and Assam, this deer is usually shot from elephants, but in Central India, where it inhabits more open country, it can be stalked and shot on foot.

The swamp deer is frequently called the bara-singha (literally twelve horns) on account of each perfect mature horn usually carrying six points, but Jerdon mentions having seen as many as seventeen points upon some old heads, and states that fourteen and fifteen are not uncommon.

Rowland Ward gives 41 inches as the length of the longest horn within his knowledge, and twenty-three as the largest number of points upon a head. Such a length is, however, very unusual, anything over 30 inches being good. The head

bearing twenty-three points is of course very unique. The horns are shed in the spring.

The vernacular names of this deer are—

Hindustani—Barasingha.
In the Nepaul Terai—Baraya.
In parts at the foot of the Himalayas—Maha.
In Central India—Male, Goen or Goenjak, Female, Gaoni.

THE CASHMERE STAG

(*Cervus Wallichii vel Cashmirianus*)

This stag resembles the Scotch red deer, but is superior in size to the latter, and also carries larger horns. It stands from twelve to thirteen hands in height. Its habitat is the pine forests of Cashmere, at an elevation of 9,000 to 12,000 feet in summer, but in winter it descends to low levels.

With regard to colour, this stag is thus described by Jerdon:—"In summer the pelage is bright rufous passing into liver-brown, or bright pale rufous chestnut. The belly of the male is dark brown, contrasting with the pale ashy hue of the lower part of the flanks. The legs have a pale dusky medium line. In females the whole lower parts are albescent."

The long shaggy hair on the lower part of the neck of an old stag adds to the rugged nobility of his appearance.

This stag, like the swamp deer, and for the same reason, is generally known as the barasingha, though

the majority of the heads which are bagged, and which are well worth securing, carry but ten points.

In Rowland Ward's *Horn Measurements*, the five finest heads quoted are one of 48, and four of 47 inches each in length on the outside curve, one of the latter bearing no less than sixteen points. Colonel Heber Percy considers that an average good head should measure 37 inches in length, 6 inches in girth above the brow antler, and should carry the full complement of twelve points.

Colonel Ward gives the following measurements in detail of the two finest heads which he has seen, both of them from the Sindh valley.

Length of Horns.		Girth above brow antler.		Divergency at tips. Greatest.	Least.		Number of points.
47 ins.	...	$7\frac{3}{4}$ ins.	...	56 ins.	29 ins.	...	13
49 „	...	8 „	...	50 „	32 „	...	12

The Cashmere stag sheds his horns late in March or early in April, and then retires to remote solitudes, where he roams apart from the hinds which he has left behind him, the ladies for the most part remaining in Cashmere. After the new antlers have attained their full growth, and the season of courtship and of war approaches, the stags return to Cashmere, and once more seek the society of the hinds.

It is then that the sportsman has the best chance of securing a few trophies, as the stags at this time betray their whereabouts by "calling." Colonel Ward states that the calling season extends from about September 20th (the date of commencement being dependent upon the weather, and

being earlier the warmer it may be) till October 15th or 20th. He also mentions that the finer the weather, the more frequent will be the calling, and that during the commencement of the rutting season, the bellowing is heard only at night. Stags are nowadays very scarce and hard to obtain, and Mr. Stone, in his book *In and Beyond the Himalayas*, considers his bag of two stags with very ordinary heads, and two brown bears, "a good reward for three weeks of very severe and continuous work."

Not only are the animals themselves few and far between, but in the pine forests which form the autumn quarters of a large proportion of the deer, they are not easy to find, or if found, to shoot.

No one should attempt to seek the Cashmere stag without first procuring and attentively studying Colonel Ward's *Sportsman's Guide to Kashmir and Ladak, etc.*

With the best of information at his disposal, a sportsman will be fortunate indeed if he should procure two or three sizeable heads during the calling season.

An officer whom I knew (Colonel A. of the 52nd Regiment O.L.I.) who had gone to Cashmere on six months' leave the previous year—when he bagged both ibex and markhor (including a 46-inch head of the former)—returned there on four months' leave in the following autumn, with the special object of trying for stags, but came back to Bangalore without having even seen one.

Heavy snow drives the stags down to low

elevations, and granted a severe winter, sport may at that season be obtained with them.

Colonel (then Captain) W. spent a winter in Cashmere some sixteen years ago. He saw stags but once, and then encountered six or seven of them all together in a glen during a blinding snow-storm. Being a magnificent shot, than whom few men could do more with the rifle, he made the most of his opportunity, and bagged no less than four of them, the last being, he told me, shot at a range of at least 400 yards.

Colonel Ward and General Kinloch agree in stating that the incursions of tame buffaloes have been steadily ousting the deer from their former haunts, and forcing them eastwards in the direction of Kishtwar, Badrawar and Chumba.

So fine a trophy, as a large and well set up head of this stag, must tempt every sportsman who may have the opportunity of seeking him with any prospect of attaining his object, to exercise considerable patience, and to spend upon his quest as much time as he can spare till success has rewarded his efforts. Colonel R. Heber Percy, in the Badminton volume dealing with the large game of India, states that he prefers the higher and more open ground, to the gloom of the pine forests at lower elevations, as the field of sport during the first part of the calling season, but adds that about October 1st, if snow has been falling on the higher hills, and frost at night has set in, the deer should be followed down into the pine forests. The admirable directions of this author

should be carefully studied by anyone who may intend to go in search of this stag.

From the accounts given by all the authors who have had much practical experience of the sport, it is obvious that, reprehensible though it be to bag small and therefore useless heads of any large game, it behoves every sportsman to exercise the greatest possible forbearance in the case of this stag, which owing to ruthless slaughter by natives in the winter, has become so scarce.

The vernacular names for this deer are—

In Cashmere—Hangul or Honglu.
Hindustani—Barasingha.

THE SIKKIM STAG (*Cervus affinis vel Wallichii*)

Jerdon states that this large stag stands from 4½ to nearly 5 feet at the shoulder, and that his coat, which is pale rufous in summer, becomes of a fine, clear grey colour in winter, the white disc being "moderately large."

Hodgson's description of the horns of this stag is quoted by both Jerdon and Sterndale. It runs thus:—"Pedicles elevate; burrs rather small; two basal antlers, nearly straight, go forward in direction as to overshadow the face to the end of the nasal; larger than the royal antlers; median or royal antlers, directed forward and upwards; beam with a terminal fork, the prongs radiating laterally and equally, the inner one longest and thinnest."

The bifurcation of the top of the beam, in lieu

of the usual trifurcation in the case of the Cashmere stag, is a marked point of difference between the horns of the two species, and in the horns of the Sikkim stag, the beam is more bent at the origin of the median tine.

The habitat of this stag is the eastern Himalayas, and according to Jerdon, who quotes Dr. Campbell, the Choombi valley on the Sikkim side of Thibet.

The horns of this stag are magnificent, and those of the three best heads mentioned in Rowland Ward's *Horn Measurements* measure in length $55\frac{3}{4}$, $54\frac{3}{8}$, $55\frac{3}{4}$; and in girth $6\frac{1}{2}$, $6\frac{5}{8}$, $6\frac{7}{8}$ inches respectively. The first of these heads carries thirteen, and the second and third ten points each.

The vernacular name for this stag is—

In Thibet—Shou.

THE BROW-ANTLERED OR ELD'S DEER

(*Rucervus vel Panolia Eldii*)

Of this deer, the "thamine" of Burmah, Sterndale says that it stands from twelve to thirteen hands, that in colour it is in summer "a light rufous brown, with a few faint indications of white spots; the under parts and insides of ears nearly white; the tail short and black above." He adds that it is said to turn darker in winter.

Eld's deer was discovered only some seventy years ago. Its great peculiarity lies in the extraordinary shape of the horns in which the burr is

almost wanting, the largely developed brow antlers extending down the face, and appearing as if they were prolongations of the beams, the latter being, seemingly, almost sessile upon the skull. From below the top of each beam arises a royal tine, and from the somewhat flattened top of the former spring a number of small points.

Eld's deer is found in Burmah (it is rarer in the upper portions of the province than in the lower), in Manipur, the eastern Himalayas, Terai, Siam, and the Malay Peninsula. It does not affect dense jungles, and even when disturbed it seeks safety by flight, not into thick forest, but into the open.

Major L., late of the 21st Hussars (now Lancers) bagged a specimen of this curious deer in Borneo. Thamine are shot either by the use of beaters, or from the backs of tame elephants.

Natives, as related by Colonel Heber Percy, approach these animals at night by the use of a light, accompanied by the jingling of bells—a combination which appears to daze them.

In *Horn Measurements*, the three largest heads measure in length 42, 41, and 39⅝, and in girth from 5 to 5½ inches; the number of points being five, ten, and twenty respectively. Another head has a girth measurement of 6½ inches, and carries no less than *thirty-five* small points. A head of 32 inches and over is a good one.

The vernacular names for this deer are—

In Burmah—Thamin.

Elsewhere where it is found — Sungrai or Sungnaie.

An interesting article, which appeared in *The Field* of December 31st, 1898, by G. R. Radmore, upon this comparatively little-known animal has, by the kind permission of the editor and of the author, been reproduced *in extenso* in the Appendix to this volume.

THE MUNTJAC (*Cervulus aureus*)

The muntjac, rib-faced, kakur or barking deer, which is widely distributed throughout India, is a small animal measuring only some 26 or 28 inches in height. The two curious folds of skin down the face, to which the second appellation is due, are bright red in colour, the creases between being dark brown; the general colour of the head and the upper part of the body and sides is bright red, with the chest, under parts, and under the tail white.

The horns are small, and are elevated on bony pedicles which are covered with hair. Each horn consists of but a beam, and one tine which springs from just above the pedicle. In place of horns, the female has two small knobs. Two formidable canine teeth, or tushes, in the upper jaw of the male project outside the lips, and on the Neilgherry hills, and elsewhere where dogs are employed to drive muntjac out of the sholahs, the former are often very badly cut by the latter's sharp little weapons, and a terrier of Colonel Ward's was, he mentions, killed by a wounded buck.

Whenever the muntjac suspects danger, he keeps

up an incessant hoarse bark, until he has either been able to determine its nature and locality whereupon he seeks safety in flight, or has decided that no further reason for fear exists, in which case he relapses into silence. Generally speaking, the barking is due to the animals having obtained a hint of the presence of man, but occasionally it is caused by the proximity of a beast of prey. Colonel Ward mentions the good service done him by one of these animals, to whom he was indebted for the location of a man-eating tiger which the Colonel duly bagged.

This deer is found at very low elevations, and also up to (according to the same author) a height of about 7000 feet in the Himalayas. In Southern India it is found in the low-country jungles and also on the hills, and although the lighter belt of forest outside the state reserves is its proper home, it is also common in the latter. I have frequently shot the muntjac when walking through the forests quietly in search of other game (still-hunting), and have also been out beating for it upon the Neilgherry hills.

Colonel Ward, out of sixty specimens shot by him, obtained two, whose horns, clear of the pedicles, measured 7½ inches in each case. These are very exceptional heads, and were bagged—one in the Kotli Dun, and the other near Mussoorie. A head of 5 inches is a good one. I have always shot muntjac with a ·500 express rifle (the smallest weapon which I ever took out in the forest), but a smaller bore would be preferable for use upon

them, as the ·500 bullet makes a terrible hole of exit in the case of a small animal shot at close quarters.

The muntjac is fond of water, and need not be looked for at any great distance from the latter. It is usually solitary, but occasionally two adult animals are found together.

The vernacular names for this deer are—

Hindustani—Kakur, Jungli-buckra.
Bengali—Maya.
In Nepaul—Ratwa.
Canarese—Kard-Coorie.
Gondi—Gutra, Gutri.
Mahrathi—Baikur or Bekra.
Telegu—Kuka-gori.
Burmese—Gee.

THE MUSK DEER (*Moschus Moschiferus*)

This tiny deer, which measures in height, according to Kinloch, not more than 20 inches, though Colonel Ward allows him 22 inches, is found in suitable localities at an elevation of over 8000 feet throughout the Himalayas. Owing to the possession by the male of an abdominal or præputial gland secreting musk, which is worth in the case of a good "pod" (according to Kinloch) at least ten rupees, this animal is constantly snared, netted, and shot by natives; and Colonel Ward says of him that "he is more hunted than any other animal that inhabits the Himalayas." This gland is fullest

in the rutting season, and then contains about one ounce.

In colour, the musk deer appears to be somewhat variable, but Kinloch describes him as "brownish grey varying in shades on the back, where it is darkest, so as to give the animal a mottled or brindled appearance." In shape, it is peculiar, the hind-quarters being elevated. Musk deer are hornless in both sexes, but the male is armed in the upper jaw with a pair of tushes which attain a length of some three inches.

Musk deer may be shot either by still-hunting or by driving. Although they occur in different sorts of ground, Kinloch found more of them in the birch forests than elsewhere. He considers the flesh excellent, though it bears a faint odour of musk.

The principal vernacular names for the musk deer are—

Hindustani—Kastura.
In Cashmere—Rous, Roos, and Kasturé.
Thibetan—La-lawa.
Ladakhi—Rib-jo.

THE MOUSE DEER (*Meminna indica*)

This diminutive, hornless animal, which weighs only five or six pounds, and measures in height only 10 or 12 inches, is found in large forests all over India. Although it is very common in the forests of Mysore, as was testified by the presence

of its tiny footprints no larger than a man's finger-nail, I seldom saw it, and then only when beating for large game, when, of course, I could not run the risk of alarming the latter by firing. It is somewhat variable in colour, being either yellowish or brownish-grey above, with yellowish-white spots in lines along the sides, the under parts being white.

An experienced forest officer and sportsman (since deceased) told me of a deadly method whereby this little creature may be brought to bag.

His procedure was to go out with a shot-gun, after a forest had been burnt, and the mouse-deer therefore driven to take shelter in any patches of grass which might have escaped the fire, and to stand at the end of one of the latter, causing his men to set fire to it from the further side, whereupon the animals, being driven out by the flames, were forced to leave their shelter.

The vernacular names for this creature are—

Hindustani and Mahrathi—Pisuri, Pisora, and Pisai.

In Central India—Mugi.

Gondi—Turi-maoo.

Bengali—Jitri-haran.

Ooria—Gandwa.

CHAPTER XV.

THE NEILGHERRY (OR NILGIRI) IBEX

(*Hemitragus Hylocrius*)

THE wild goat, which is, by a misnomer, termed the "Neilgherry Ibex," is an animal allied to the tahr of the Himalayas, but, as by the name of "ibex" he is known all over Southern India, it is inadvisable in his case to attempt more rigid nomenclature.

The Neilgherry ibex is found only upon the hill ranges of Southern India, and is a very local animal, possessing but a limited range of distribution.

The Neilgherries, Anaimalais, Western Ghauts, Pulney Hills, and a few smaller ranges which are spurs of the above, form the habitat of this splendid wild goat, which rejoices in precipices, and can move at speed over ground which, even with the greatest care and circumspection, no man could traverse.

Although the Neilgherry ibex prefers the open grassy slopes for grazing purposes, he will, when alarmed, betake himself to forest without hesitation; and cunning old bucks—particularly in localities in which they have been much disturbed—are very

partial to precipitous hillsides, well clad with vegetation, upon which they are very hard to detect, and where, though the grass be of inferior quality, they can still find plenty to eat in almost perfect security so far as any danger at the hands of man is concerned, though, of course, the animals run greater risks from their most destructive foe, the panther, in such situations than when out on the open hills.

Ibex usually retire to a precipice when they wish to lie down, and are fond of shade for the enjoyment of their midday siesta ; but in remote localities they may be found taking their rest upon the open hillsides.

In colour the adult male is very dark brown, inclining to black, with a lighter patch, or "saddle-mark," on the back. The hair on this saddle-mark grows lighter with age, until, in the case of a very old buck, it becomes nearly grey. The females and young are much lighter in colour. In size, an adult male far surpasses the members of his harem, and he is really a large animal, standing from 41 to 42 inches in height at the shoulder, and being, moreover, stoutly and heavily built. He differs from the true ibex, in that he lacks the beard, and long, knotted horns which are characteristic of the latter.

The record head of a Neilgherry ibex is 17¼ inches, but anything over 14 inches is good, 15-inch horns being but very rarely bagged in these days.

It was during my earliest shooting trip upon the Neilgherry Hills that I saw an ibex for the first

time, but not until I revisited them upon a subsequent occasion did I succeed in bagging one.

In 1886 I went out for a few days' shooting to Neilgherry Peak, a fine sambur-ground and a locality in which ibex were sometimes to be found. I had taken out a small tent which was pitched in a sholah (or dense cover) near a clear stream of good water. I hoped to obtain a little sambur shooting, and I knew also that there was a chance, but only a chance, of my seeing ibex, since they merely occasionally visited the locality which I was about to work. This ground I had been over only a few days previously from the bungalow of a relative (who lived a lonely life upon an estate a few miles off), but upon that occasion I failed to obtain either a shot at sambur or even a glimpse of an ibex.

One misty afternoon, I went out from camp and proceeded towards a tract where the open grass hills, with sholahs in the dips between, sloped down to the large forest, which, interspersed with rocky precipices, and everywhere exceedingly steep, stretched sheer down into the low country of the Wynaad (or Malabar). Here, in the evening, I hoped to see sambur emerge from the dense sholahs, or from the edge of the large forest, to graze in the open.

I was making my way to a commanding knoll, when I suddenly discovered that I had forgotten to bring my pipe, or my tobacco, I forget which, and I therefore sent one of the two men out with me back to camp to fetch the missing article, but as he was a long time in returning, and since I

feared that he might lose me in the heavy mist, I shortly afterwards sent the other one also to hurry him up. Meanwhile I seated myself on the high top, and when the mists temporarily lifted, carefully examined through my telescope all the ground below and before me. No sambur were visible—in fact, it was yet too early in the afternoon to expect to see them out at graze. But what was that animal standing motionless, with all four feet close together, apparently upon the sky-line of a low ridge running at a right angle with the hill upon which I was seated, and extending down towards the precipitous and forest-clad descent to the Ouchterlony valley? I knew that it *must be* an ibex, though I had never before seen one in the flesh.

The mists soon rolled over all the hillsides in front of and below me, and obscured the view, and I sat, and (I am afraid very impatiently) awaited the time when they might again remove their unwelcome mantle from the coveted game which had just been viewed. Upon the clouds once more lifting, there stood the ibex, quite motionless, and in the same attitude as before, apparently gazing intently down into the valley where the coffee plantations and the planters' bungalows were clearly visible, and whence I could hear the sound of the factory gongs.

This alternation of all-obscuring mist and its temporary removal was again repeated at least once, when, after what seemed to me an interminable and unreasonable delay, to my great

delight my men returned. We then set off at once to try to stalk the ibex. To reach the place, we had to pass over ridges of grass hills lying at the foot of a high mountain which terminated on our side in a precipice; and it was on a sloping spur at right angles to this, and far below it, that I had seen the game. At last we reached the ridge on which, as I thought, I had carefully marked the ibex, but on looking cautiously over it I could see nothing of him. One or more similar spurs running parallel to this one then came into view, and I wondered whether I had made a mistake and had seen him on a further one.

We crossed the intervening valley, and I looked over the next ridge in vain, and then proceeded towards a steep precipice on the edge of the sheer height above the deep gorge. It was very strange, and I could not imagine where on earth the ibex had got to, when all of a sudden, as if he had dropped from the clouds, there stood the noble buck, on the very edge of the precipice, and only, as I estimated, about 250 or 300 yards off. I instantly lay flat, and made my shikarrie do the same (I had left the other man behind in a valley to wait for us), and, not daring to move hand or foot, intently watched the game. His curved horns looked splendid through my glasses, and he appeared to be just the colour of an ordinary Mysore black buck (in Mysore black buck do not usually attain the jet-black hue of the same animal in the north-west) with the exception of wanting the very

white belly which pertains to the latter. I dared not move, nor attempt to approach him, until the now-desired mist should again curl up and render an advance possible.

The ibex, after gazing at the edge of the precipice for a time, came forward a few yards and lay down under a rock. Between my position and his own was a drop down about ten feet of rock, with a narrow strip of stunted trees on my left front, and a few scattered rhododendrons directly opposite me. If once I could attain the shelter of that narrow strip, I believed that the ibex lying on the grassy stretch beyond would be mine, but I dared not attempt to negotiate the drop down the rock in front until the mists should obscure me from the game.

At last the wished-for moment arrived, and leaving the shikarrie to lie flat where he was, I descended the rock, and successfully gained the shelter of the trunk of a rhododendron tree before the mists again cleared off and revealed the ibex, who was then standing up and grazing. Thinking that he was still too far for certainty, I determined to wait till he should go over the edge of the precipice, when, by running up, I hoped to get a shot at close quarters below me. The animal made this move sooner than I expected, but as he went slowly, I did not think that he was alarmed, and waiting only until he disappeared over the edge, I ran up, meeting two monkeys on the top, but the ibex was nowhere to be seen, though I saw below me various forms in which he had been lying,

whence I inferred that he had for some time been inhabiting the locality.

Cruelly and grievously disappointed, I retraced my steps to where I had left my shikarrie, but to my amazement he was nowhere to be found. Dusk was approaching, and not knowing the ground, and seeing nothing of the man, I was obliged to shout for him, although extremely unwilling to disturb the place by so doing. My calls, however, elicited no response from the fiend in human shape, who, as now seemed probable, must have designedly disturbed the ibex, and prevented my bagging him; though they did from the coolie who had been left in a hollow, as before related, to wait for us. I had fortunately made the latter bring a lantern with him, and we eventually reached camp. If I remember rightly, the scoundrel who had deserted me arrived there after I myself did, and without being able to give any satisfactory explanation of his conduct. It seems probable, however, that as a "saddle-back," or old buck ibex, is a great and a rare prize upon the Neilgherry hills, the villain, who had accompanied me as shikarrie, wanted to save this animal for some local and constant patron, rather than permit me, a casual visitor, to bag it. He must have got up and walked up the hill in full view of the ibex, while I was making my stalk, and then, fearing the consequence of his villainy, have considered it advisable to keep out of my way as long as possible. In many years' experience of big game shooting, this is the only instance of such conduct on the part of a shikarrie with which I

have ever met. Once, and only once, I have reason to believe that some trackers, who were then quite new to me, deceived me by apparently intentionally failing to properly make out the tracks of some bison; but if so, fear of the animal, should one be wounded, was the sole possible motive in their case.

Upon returning to camp, I learned that, during my absence, a whole herd of ibex had passed along the face of a hill just above my tent and in full view of the men. I spent all next day out after ibex, but saw none; and I had to return to the plains without viewing another of these splendid wild goats, though I enjoyed some small success with sambur.

Upon hearing my account of the animal which I had seen, my relative (who as I before mentioned was then living near the place where I saw the buck) had no doubt from my description that I had seen, and been very near bagging too, that greatest prize of the Neilgherry sportsman, a "saddle-back"; and I could not help regretting that, since my virtuous conduct in refraining from firing a long shot at him had gone unrewarded, I had not risked it, and made at least a bid for so coveted a trophy.

It happened that in the Christmas holidays of the same year, when I was accompanied by a friend (D.), I was able to spend ten days upon ibex ground.

We had sent on our kit (including a hill tent), and also our servants, days beforehand; and leaving the plains upon the first day of the holidays, arrived at

Ootacamund. Here we found that our belongings had, by the good offices of a relative, been despatched upon sixteen pack ponies to a camping ground called "Banghy Tappal" on the bridle-path to Sispara. One more pony was needed for the few requirements which we had brought with us; and these seventeen ponies, two local shikarries, six coolies, and our servants, constituted our following. We reached the tent next evening after a long ride from Ooty, and found all ready for us, and dinner in course of preparation.

My right foot was sore, owing to an internal bruise incurred (apparently) while traversing stony ground in pursuit of antelope on the plains; and I doubted my capacity for the steep hill-walking which I should have to undertake in order to achieve success; and as moreover I have a very bad head for precipitous ground, my chances of bagging an ibex—the game on which my heart was chiefly set—seemed poor indeed. I hoped, however, to at least shoot some sambur stags.

For nine days D. worked very hard, and I myself as persistently as the tender condition of my foot would permit, but upon the ninth evening D.'s total bag was one stag with horns of about 31½ inches in length, and mine two young buck ibex shot out of a herd met with on the first day on the open grass hills.

Bad luck had dogged us throughout, though I had seen ibex upon three occasions, and upon each had fired at them. D. had but once seen these animals, and then came upon them—far away

from their usual haunts—near the top of a high grass hill in sambur ground, to which I was, one afternoon, wending my way in hopes of seeing a stag, and of enjoying an evening stalk, in the innocent belief that D. was working the ibex-cliffs a good distance off. He had been so doing, but having left them, went across to the same sambur ground, and there saw the ibex as above stated. When I reached the ridge overlooking the valley, in which, later in the evening, I hoped to see sambur emerge from the forest, I spied D. and his men proceeding towards a commanding hill across the valley in front of me. What they were doing, and where they were going to, I had no means of knowing, and it was not until we met in camp in the evening that the horrible truth in all its nakedness was exposed. D., having in vain tried the ibex ground, had proceeded to the valley wherein I saw him, to look for sambur; and while on this quest he spied a herd of ibex on the high grass hill across the valley, and amongst them was a patriarchal "saddle-back." D., who had never seen ibex before, described the saddle-mark, as viewed through his glasses, as a yellow patch upon the black ground of the rest of the animal. It then happened that while D. was laboriously stalking down the hill-face opposite to the ibex, they suddenly dashed off and disappeared from view over the brow. He was at first at a loss to understand the reason for this move upon their part, but soon discovered it in the shape of myself and my men on the sky-line of the opposite hill

down which he had been cautiously creeping, and, up till this unlooked-for disaster occurred, with perfect success so far as being undetected by the game was concerned. We, not having seen the ibex, and ignorant of the cruel disappointment which we had caused, took up a position to watch for sambur, but saw none, and returned to camp. I was greatly disgusted and vexed with myself when I learnt the mischief of which I had been the unwitting cause, and D.'s good temper, in giving vent to not even so much as one "cursory" remark over so grievous a *contretemps*, struck me as beyond all praise.

If our luck with ibex had been bad, it had in the case of sambur been but little better. We had seen plenty of hinds and fawns, and some brockets, but the big stags were almost invisible, apparently coming out to feed too late at night, and retiring to cover too early in the morning, to give us any opportunity of stalking them. I had, however, seen two really good stags, at one of which I had fired two long shots without effect. We had tried everything—had shifted our camp from Banghy Tappal to a place further on, and again moved back to the former; we had even so far condescended, and lowered ourselves, as to attempt two days' beating, but, on the evening of our last day but one, our total bag consisted of one stag and two ibex.

The next day—our last chance of shooting—we decided to send our camp to Avalanche on the return journey to Ootacamund, and, going together,

to try the Iguindy precipices *en route* to the former.

We started in the morning and had a long walk before we reached the crags for which we were bound. When at last we arrived at the place, we found a deep valley with precipitous sides running up at right angles into the hilly ground on which we stood, and there terminating in a wide bluff of rock. In front, down the main valley, all was open grassy down, but on the left, in a small intersecting nullah, the precipitous hillsides on either hand ran —here and there as bare rock, and here and there as abrupt slopes covered with grass and scrub—far down below into the forest-clad country at the foot. First, from the left hand side, we carefully examined the opposite slopes and precipices with our glasses, but could make out nothing; then, from the rocky bluff at the head of the nullah, we examined both sides with no better success, and afterwards proceeded to ascend a high grass hill, which rose on our right hand from the nullah's precipitous edge. We had accomplished perhaps three-quarters of the ascent of this hill, when, under some short rhododendron trees with low-hanging branches on our front, D. and one of the shikarries saw a branch, which had evidently been moved by some animal, sway back towards us. We supposed that a sambur had gone off, but we saw nothing, and proceeded to complete the ascent of the hill. This being accomplished, we were descending the other side (and so going parallel to the course of the before-mentioned nullah), when we came to a

branch ravine, jutting out from it at right angles, whose sides were precipitous, and beyond and to the right hand lay open downs. Suddenly, on the expanse of short grass before us, and perhaps 300 or 350 yards off, I saw a single buck ibex running towards the precipices which lay to our front beyond the intersecting ravine. He was evidently alarmed, but how, or why, or whether he had seen us, or had winded us, I did not know.

He stopped and stood, and I whispered to D. to put up the highest sight on his rifle and try him, which he did, but missed. As the buck dashed off, I fired both barrels without effect, the animal, having crossed the grassy downs, being lost to sight over the edge of the precipice. I felt that we had, alas! seen the last of him; but I was mistaken, for in a few seconds, and to our great surprise, we saw him returning along the edge of the nullah, having evidently failed to find a way down the steep bluff, and he then entered and rushed down the opposite face of the intersecting ravine near which we stood. I fired two long shots, and D., who had a single-barrelled rifle, one, as the ibex dashed down the abrupt slope, but all three shots missed. Hastily reloading, as he ran almost directly below me, and about 400 yards off, I fired once more, heard the welcome "thud," and saw the ibex rolling over and over, out of sight, far down below. I felt quite sure that he was dead, but I entertained great anxiety as to whether the men would be able to negotiate the steep descent. To my unpractised eye, the place

looked almost, if not quite, inaccessible, and besides, I did not know how much further he might have rolled after we had lost sight of him. The men went off, and we watched them descend without difficulty to the spot where we had last seen the ibex, and a thrill of exultation stirred me as I saw the shikarrie hold up his hat, and heard him give a shrill whistle as a signal that they had found him. My self-congratulation and joy were, however, but short-lived, for, to my unspeakable horror and dismay, I next instant saw the ibex running off in front of the men till he again disappeared from view, as did his pursuers, once more to reappear with the same result.

I felt very anxious, but there was nothing to be done but to await the issue of events, so we sat down and discussed our tiffin in anything but an exultant frame of mind. I was in terrible dread lest we should lose the animal after all, and I ate my luncheon with a heavy heart indeed!

By-and-by a coolie came up from below, and told me that they wanted a rifle, that the ibex was a very big "saddle-back," and that he had only a hind leg broken. This was too much for me, for, in spite of my natural dislike to steep ground, I did not want to entrust them with my rifle, and still less did I wish that the ibex should be bagged only partly by me; and so, assisted by the coolie, I succeeded at last in accomplishing the descent, while D. remained on the top to await my return. I found the shikarrie (Chinniah) crouched close into the hillside, watching the ibex which was

lying down on the other side of a small nullah, only some thirty or thirty-five yards off. Sitting down, to enable me to take a steady shot after the great exertion which I had undergone, I fired, and the buck rolled over and over down below. To so nasty a place had he now fallen, that neither of our two shikarries could manage the descent, but, as good luck would have it, one of our coolies, who was an expert cragsman, succeeded in getting down, and in bringing up to us in turn, first the head, and then the skin of my coveted prize which was just beginning to be entitled to the honorific title of "saddle-back," since light hairs were commencing to show over the dark ground-colour of his loins. All this had occupied a considerable time, and the skinning of the slain appeared to me—sitting, very ill at ease, on very little of the steep hillside—to be an interminable operation, but at last I started to make the ascent. It would, I suppose, have been easy enough work to anyone possessed of a good head for, and accustomed to climbing; but to me, with my slippery, smooth-soled boots, it was difficult and "jumpy" enough work in places, and I needed constant aid from Chinniah. What toil it was! Every few feet I had to sit down, and the perspiration simply poured from my face, though the temperature was sufficiently cool, more especially since a thick mist had come on enveloping everything in its cold, wet blanket.

At last, quite done up, I reached the top, and flung myself down on the grass, while I sent

Chinniah to where I had left D. and the tiffin bag, to bring me some whiskey and water; and then, much refreshed, I rejoined D., who had been marvelling at my long absence, and wondering what he had better do, should it prove that I had come to grief and been smashed by a fall down a precipice.

The horns of my buck measured 14½ inches, and though one of them had been somewhat broken in the course of his various involuntary somersaults, it was satisfactorily mended by the taxidermist who set up the head. The ibex had received the first successful bullet in his hind leg, which it had broken at the hock-joint; and so great was the distance, that the ordinary hollow Eley's express bullet extracted therefrom had not broken up at all, and was only slightly flattened at the head where the copper tube had been driven into the body of the bullet. The charge of powder used was 4¾ drachms.

We had a long tramp to the Avalanche bungalow, and it was not until some time after darkness had set in that we arrived there. On the next day we returned to Ooctacamund, and thence to our duty in the plains below, looking forward to the time when we might once again hope to enjoy the fine sport of ibex shooting on the lovely, cool heights to which, for the present, we were compelled to bid *adieu* and *au revoir*.

The hot weather of 1888 found me once more upon the Neilgherry hills, bent upon a shooting

trip of a month's duration, and accompanied by my wife and by my cousin R.

Fond as I am of room and comfort in camp, my trip with D. in the Christmas holidays of 1886 showed me that a hill tent was far too cumbersome a piece of equipage for porterage in a country where carts cannot be taken, and where pack ponies and coolies must be solely relied upon for transport.

We had therefore determined to do with as light tents as possible, and so took only a field officer's Cabul tent for my wife and myself, a ridge-pole tent of slightly larger dimensions for my cousin, and a rowtie for the servants.

We left Ooty on the 3rd April, and intended to spend the first night out at the Avalanche bungalow—a traveller's bungalow in a picturesque spot on the way to our first shooting ground which we hoped to reach the next day. This bungalow consisted of one centre dining-room, and two large bedrooms with bathrooms attached. Off the front verandah were two small pantry-rooms without bathrooms.

A month's trip away from civilisation necessarily entails a good many preparations, and as we did not wish to waste time in Ooty, ours were rather hurried, and we did not leave that station until somewhat late in the day. It was not until after dark that we reached the Avalanche bungalow, but as our servants and kit had long preceded us, we hoped to find all ready, and to be able to have dinner and go to bed in good time with a view to an early start for our shooting grounds next morning.

Little did we anticipate the indescribably unpleasant, and to us quite unique, experience of the next few hours.

On arrival at the bungalow, while R. went off to the stable to look after the accommodation of our steeds, my wife and I found that all the habitable portion thereof was occupied by a general officer and his wife and by a sporting parson.

To our utter disgust and horror, we found our baggage all lying strewn upon the gravel in front of the door, while we were met by a servant in the front verandah, who, putting his back against the door of the dining-room in which the trio were then seated at dinner, informed us that we could not go in there, but that one of the small pantry-rooms off the front verandah was available for us. (The other was being used as a pantry by the other travellers' servants, but we soon made them vacate it, on finding that no other second room was available.) The situation was certainly a difficult one.

To make a long story short, however, we had to put up with great inconveniences that night, and at earliest dawn repacked our kit, and proceeded on our way to the shooting grounds.

That day we pitched our camp at Banghy Tappal, and thence, three days later, when out upon a high hill at some distance from camp, we viewed a large number of ibex upon an opposite precipitous bluff, a wide, deep valley, quite inaccessible in view of the necessity for reaching camp before nightfall, dividing us from them.

On the next day, we moved our camp to Bhowany, from which, both the hill on which we had seen the ibex, and the one from which we had viewed them, were easily accessible.

It was not until the ninth day after we began shooting that I fired my first shot at ibex, though I had, in the meantime, bagged three stags.

On that morning (April 13th) I went to the hill on which we had seen the ibex on the seventh idem, and I disturbed first a herd, and then four fine bucks which were together on our side of the hill, without getting a shot, and all the animals had gone towards the precipice, which lay on the further face where we had previously seen them from across the Bhowany valley, as above related. I found them in the rocks just below the brow, and fired a hasty shot at one as it bolted. The shikarrie went down to see the result of this shot, which he reported a miss; while I went a little further along the hillside, and there, far down below—almost at the bottom, as it seemed when viewed from above, and on a little plateau—stood an ibex, broadside on.

I examined it through the telescope, and its horns swept back so far that I decided that it was a buck, but at first I would not fire at it, since the distance appeared an impossible one. Two or three times I aimed at it, and still the animal stood. At last I determined to attempt the shot, and did so, allowing a little for a high wind which was blowing across the precipitous hill face. At the report, the ibex fell, rolling over and over, but

trying to recover itself, so I fired another shot (which I think missed), and it then disappeared amongst bushes in a ravine.

The shikarrie and one of the coolies went down and brought up the head and skin, and they, and the other coolies, then went off to eat their mid-day meal (which they had brought with them), and as no water was to be had near our position at a great elevation, they were away for a considerable time. This was a source of great annoyance to me, since I was relying upon their bringing me water, that which I had taken with me having been almost boiled in the sun, and tiffin under the circumstances being a difficulty. While they were away, I saw three or four more ibex below the hill in the act of coming up it, and I fired at the largest. The muzzle of my rifle was, however, not clear of a rock in front of me, and the bullet knocked a piece off it and went—I know not whither—and my second, I think, missed also. Running to a grassy spur which commanded a view of the precipice to my right, I saw some ibex crossing a sheer sheet of rock, so nearly perpendicular that nothing but a wild goat could have crossed it, and I fired at what I thought was the largest, and sent it sliding down the rock far below, till it disappeared from view. I went myself, as I had already done before, to search for water, but found only a spring full of black, peaty mud, which was cut up by tracks of the wild goats; and it was only with great difficulty, and by the use of the cup of my flask, that I managed to skim

off a few drops at a time pure enough to drink at a moment of distress.

During one of these expeditions, I had seen two little kid ibex, which had come over the top of the hill, and which ran only a short distance, and then lay down on the rocks, making a soft bleating which sounded like the mewing of a cat.

The shikarrie and coolies returned at last, bringing water for me, and while they busied themselves in recovering the head and skin of the second animal, I went on a prospecting expedition to the right-hand side of the hill, and there, on a little piece of flat near its bottom, I saw six or seven ibex. One was conspicuous amongst them in size, and I knew that it was a buck. Sitting down, and taking a steady aim, I fired, and the animal fell and lay kicking where he had been struck. I watched him for a minute or two to see if he required another bullet, but as he soon lay quite still, I started to again go back over the brow of the hill in order to try to find the shikarrie and coolies. After ascending a few yards, I saw the ibex give another kick, and I again watched him, but he showed no further signs of life. Suddenly, from the jungle below, appeared a fine dark-coloured buck, who looked larger and duskier than the one just shot. He stared at his slain friend, and started, shying off like a pony, and then stood looking sideways with a startled air at the dead buck. Sitting down, I took a steady shot at his back, and fired, and to my satisfaction I saw

him tumble over and disappear in a nullah below.

The shikarrie was soon found after he had brought up the spoils of ibex No. 2, and I despatched him on his third downward journey to bring up those of the two big bucks just slain; and well content, I ere long set off for camp with the trophies of the four animals. The heads of the first two bagged were small, and in the case of one of them the horns at their bases were so thin that it was undoubtedly a doe, in spite of the shikarrie's asseverations that all the animals were bucks. The length of its horns, as viewed from the side, had deceived me in this one case. The heads of the two last slain formed handsome trophies which I was very pleased to obtain.

I remained in camp a month in all, but got only two more ibex—one a big dark buck with a slight commencement of the saddle-mark, and the other a brown buck. I missed some chances, however, and during the whole time I did not once see a real "saddle-back." The heads of the two best were, however, little inferior in length to that of the "saddle-back" previously mentioned, while one of them considerably surpassed it in thickness, and I was fortunate in obtaining such good heads on the very much over-shot Neilgherries.

On another occasion, upon the selfsame hill, I was greatly entertained by three pretty little ibex kids. I had disturbed a herd, which had bolted and disappeared from sight down below, when I heard, on some rocks in front, the mewing noise

which the two kids had made on the previous occasion. I soon discovered the engaging little animals, and they came towards us out of curiosity. They came near, and, hiding behind a rock, I tried to bleat like a goat and to call them up, while I sent my men to make circuits from both right and left simultaneously, and to close in and attempt to catch one of them. Tame as they appeared to be, however, they were far too wide-awake for this, and dashing off, they crossed steep, rocky ground at speed, and disappeared down below.

By-and-by I again came upon two little kids on the top of the hill, and though I called one of them up to within about fifteen or twenty yards of me, all attempts at effecting a capture resulted in failure.

They were very entertaining little beasts, with soft, fluffy hair, and I hope that their mammas soon returned and took charge of them, and kept them out of the way of the prowling hill panther, whose penchant for ibex is as pronounced as is that of his low-country congener for the domestic goat and its young.

Ibex were rare upon the Neilgherry hills at that time, and it was very seldom that a buck with a fair head was seen upon them. This was a very great pity, for the sport of pursuing them is a most fascinating one, entailing as it does hard exercise in a lovely climate amongst beautiful scenery, while the game itself is so vigilant and hard to approach, that it is well worthy of pursuit by the most experienced and skilful sportsman.

For some years, however, ibex have been strictly

preserved upon the Neilgherries, and the higher ranges of those hills now contain a goodly number. I have comparatively recently stalked these animals in the Travancore hills, but the "saddle-backs" were not with the herds at the time, or apparently much at all upon the ground which I was working, and I met with no success.

The beginner who is in search of ibex must remember that the animal is possessed of extraordinary powers of vision, that he is also endowed with extremely keen olfactory nerves, and that the necessity which exists for him to be ever on the watch against surprise on the part of his deadly and watchful foe, the panther, renders him extremely wary.

Ibex, like all other animals, seldom look up hill unless their attention be attracted by some sound, as, for instance, that made by a loose stone rolling down the hillside; consequently the sportsman's aim must be to, if possible, get above the game. Patience is highly necessary in ibex shooting; the binoculars or the telescope must be kept in constant use as long as any likely ground is in sight, for, though none may be visible, it is quite possible that they are not very far off, concealed by bushes and grass on the ledges of any of the neighbouring precipices. As in deer stalking, the main object is to see the game before it has discovered the sportsman, and having seen it, to plan the stalk with due attention to the configuration of the ground, the direction of the wind, and the cover available for concealment during the approach.

It is far better not to attempt to stalk in too close to the game. One hundred yards is quite near enough, and if it be necessary to approach within half of that distance before it becomes visible, the very greatest caution must be exercised, and the sportsman must pay all possible heed to his feet, avoiding the loosening or crushing of a single stone or the breaking of a twig as he walks. Once within range, a bullet well placed, on or behind the shoulder, will bring the animal fired at to bag; but for humanity's sake long shots should be avoided, as an ibex shot too far back, or with a broken limb, often escapes to perish miserably.

There is much ibex ground upon the Koondahs, as the higher ranges of the Neilgherries are called, upon the Anaimalais, the Travancore hills, and the Western Ghauts, as well as upon other hill ranges of minor importance in the South of India.

The Government has, however, commenced granting land for coffee cultivation upon the Anaimalais, so that in course of time the ibex upon these fine hills, plentiful though they now are, will doubtless soon become comparatively scarce.

This has been their fate upon the Travancore hills, which have of late been much opened up for cultivation.

The Tamil names for the Neilgherry ibex are Warra-adu and Warri-atu, and sometimes plain Adu (goat).

CHAPTER XVI.

BRIEF NOTES ON THE WILD GOATS OF CASHMERE AND LADAK

THE HIMALAYAN IBEX (*Capra Sibirica*)

THIS splendid wild goat is found throughout the higher ranges of the Himalayas, except upon the extreme southern slopes, and portions south and east of the Sutlej river, where it does not occur at all; and numbers of sportsmen go annually to Cashmere with the object of securing specimens of this and of other Himalayan game.

General Kinloch gives his height as about ten hands, and describes his colour as a dark chocolate, varied by patches of dirty white. He has a long, flowing, shaggy black beard. Both sexes have horns, those of the female being very small—only about a foot in length—while the male's are long, thick, scimitar-shaped, and heavily knotted, forming most imposing and ornamental trophies. Though horns up to some 56 inches have been bagged (Rowland Ward quoting thirteen heads of 50 inches and more), the sportsman who nowadays is lucky enough to secure a head of 46 or 47 inches may

consider himself indeed a favourite of Fortune. Two acquaintances of my own have in comparatively recent years bagged heads of this calibre, but any horns of over 40 inches are well worthy the expenditure of much time and labour to secure.

Colonel Ward writes that April and May are the best months for ibex shooting, though June also, he says, is a good month for it. Colonel Ward's *The Sportsman's Guide to Cashmere and Ladak* gives details as to localities, and this, as well as General Kinloch's grand work, should be purchased by any sportsman who may intend to shoot ibex and other game in Cashmere. But the new hand at this shooting must bear in mind that many of the localities mentioned in Colonel Ward's book have long since been played out so far as heads worth shooting are concerned, and that, as time goes on, sportsmen must make up their minds to penetrate further and further into the interior, and to seek nullahs which have been but little shot over, if they be determined to bag fine trophies. The same remark applies to all Himalayan game. Unless a sportsman who intends coming out from home on a shooting trip to Cashmere, or one in India who has never been in Cashmere before, can obtain from friends really reliable recent information as to localities, his best course, having first studied Ward's and Kinloch's books, is to reach Srinagar very early in April, and ascertain upon the spot what had been done in the previous season, and where the best bags

had been obtained, and then, if possible, to go still further afield.[1]

A friend of mine—Major G., R.A.—only a few years ago, made a splendid bag of ibex upon the occasion of his very first expedition to the "happy valley." He, however, ran considerable risk in crossing a very high pass before it was safe, and carried his life in his hand during the perilous journey. He brought back eleven heads, of which the largest measured 47, and the smallest 36 inches. This sportsman adopted a plan of which I have never read in any book on Himalayan sport. In place of going out day after day and looking for the ibex himself, he used to send out his Kashmiri shikarrie to inspect the ground, and, when he ascertained from the latter that a herd with one or more good heads in it was frequenting a certain locality, he made his plans for endeavouring to obtain an interview at close quarters with the game.

Another friend—Major D., of the 52nd O.L.I.—some years ago, had a very disastrous start, though in the end he did well.

In crossing a high pass, some eight marches beyond Srinagar, a heavy snowstorm came on. His shikarrie did not think that it would long continue, so recommended the Major to descend to a lower elevation, leaving his camp standing, and taking with him only his rifles and ammunition.

[1] In the latest edition of his book, Colonel Ward takes a very despondent tone with regard to Cashmere sport, and has even altered its title, considering the Cashmere of the present day less a paradise for the sportsman, than a fine field for the tourist.

He acted on this advice, but the snowstorm lasted for three days and three nights, the whole camp being buried beyond hope of recovery until the snows should melt. Major D. had therefore to return to Srinagar to obtain new tents and a fresh outfit. Cholera was raging at that place at the time, and his shikarrie (one of the best in Cashmere) contracted the disease and died, his coolies moreover running away; while another sportsman pressed on, and occupied the splendid nullah for which he was bound.

Such a combination of misfortunes was sufficient to dishearten the keenest votary of Diana, but Major D. pluckily persevered, and, crossing the Indus and working in the direction of Skardo, he made a good bag.

The etiquette in Cashmere is that a nullah belongs to the first occupant so long as he may choose to remain in it, and great is the racing to secure the more coveted localities should two or three men have made up their minds to try to secure the same hunting-ground.

Camp life in Cashmere is cheap, but the sportsman must make up his mind to rough it, and to eschew most luxuries, on account of the difficulty of transport, coolies only being available for the purpose there.

Splendid ibex and markhor heads have lately been bagged on the Gilgit side. This part has long been closed against casual sportsmen, on account of the turbulence of the tribes inhabiting it, but military officers on duty there have recently

had magnificent opportunities of bagging aged ibex and markhor in a practically virgin locality. By the time that it will have become settled, and safe for ordinary sportsmen, the vicinity of Gilgit will probably be played out so far as large heads of both of these wild goats are concerned; and anyone who may desire large heads will have to go beyond the area hitherto shot over to find such.

The country inhabited by ibex consists of rocky, precipitous hills at high elevations, and, in the most favourable season for shooting the game, just above the snow-line is the point at which to look for it. The animals, lying up in the rocks and snows above, descend in the evenings to crop the new growth of herbage springing immediately after the melting of the snow below.

In shooting all hill game, it is desirable to at least spot it from above. The situation may be such that a shot from the same level, necessitating the sportsman's descent before he can take it, may afford more chances of keeping the game, once it be disturbed, in view, in order to obtain several consecutive shots; but the tendency of all wild animals is to look down-hill, and it is advisable to sight the game from a point of high vantage, to avoid the fatal alternative of being first observed by the keen-sighted wild goats.

Needless to say, the wind plays a most important part in this, as in all other kinds of hill stalking, and in all hill ranges the wind is often very tricky. Any of my readers, who are fond of target shooting at long ranges, will clearly gather my meaning, even

if they have not been out shooting in the hills, and have not seen the eccentric currents caused by the configuration of a mountainous country. One golden rule, which a sportsman who had shot in Cashmere and Thibet laid down to me, is this, viz., that "Wind will always blow up-hill if it can," which fact affords a further reason for keeping well above the game.

Ibex have of late years generally been shot with expresses of ·500 or ·450 calibre, but *the* ibex weapons of the present and the future are undoubtedly the ·303 sporting rifle and the ·256 Mannlicher, the flat trajectory of both giving them an enormous pull over all other sporting rifles yet invented. This advantage—a great one anywhere—is enormously accentuated in the case of shooting in the hills, where accurate judgment of distance is often extremely difficult.

The vernacular names for the ibex are—

In the Himalayas—Sakin, Iskin, Skeen.
On the Upper Sutlej—Buz.
Kashmiri—Kale.
In Kulu—Tangrol.
In Ladakh—(male) Skin, (female) L'Damuo.

THE IBEX OR WILD GOAT OF ASIA MINOR

(*Capra Ægagrus*)

This wild goat extends from Asia Minor into Sindh and Baluchistan, and is also found in Afghanistan. In colour, its short coat is brown,

becoming, however, lighter in summer, with an almost black line along the back. The male has a black beard. The females and young are lighter in hue. The animal is smaller than the Himalayan ibex, and is found at very much lower elevations. The difference between the horns of this species and those of any other of its tribe is well described by Lieutenant-Colonel R. Heber Percy in "Indian Shooting," in one of the two volumes on *Big Game Shooting* in the Badminton Library, in the following words:—"Instead of having a flat front and being thinner behind than in front, as most other ibex horns are, these horns have the edge in front, a scimitar-like ridge running up the front of the horn, wavy but unbroken for about one-third above the head, and then represented by knobs which spring up at some distance apart for about another third, when the ridge appears again, but rapidly dies away towards the point. The sides of the horn, too, are smooth, the outer side rounded and the inner flat, the knobs not running down the sides as in other ibex."

This animal has been shot with horns of over 50 inches in length, but anything approaching 40 inches is well worth shooting.

The sportsman who may wish to shoot this animal should read the account given of it in the above-mentioned volume of the Badminton Library, and also Sterndale's notice of it in his *Natural History of Indian Mammalia*.

THE WILD GOATS OF CASHMERE

THE SEVERAL VARIETIES OF MARKHOR

(*Capra Falconeri, vel Megaceros, vel Jerdoni*)

Of all the wild goats in the world, the markhor carries by far the finest trophies. This splendid animal varies, not only in appearance and size, but also in habits, in the different localities wherein he is found; so much so that General Kinloch considers that the two most divergent types, viz., the spiral-horned and the straight-horned, even if they possess a common origin, are now entitled to be considered different species.

In his winter coat, the general colour of the markhor is dirty bluish grey or bluish white. He carries a long, black beard, and his shaggy, white mane, extending down to his knees, enhances his imposing appearance. In summer his coat has a reddish tinge. He is a powerfully built animal, standing about 11 hands at the shoulder.

General Kinloch, besides the two widely divergent types mentioned above, describes also two intermediate forms.

His classification is as follows:—

1. *Spiral-horned.*—Extreme type the *Kashmir Markhor* (*Capra megaceros*): horns "flat and massive, and rising in a fine open corkscrew form with widely diverging tips to a length of upwards of five feet measured along the spiral, and with three or four twists." (This variety he considers

the finest of all.) It is found on the Pir Panjal and Kaj-i-nag ranges. Rowland Ward quotes one head of this type measuring 63, and many between 50 and 60 inches respectively in length.

2. *Straight-horned.*—Extreme type the *Sheik Budin Markhor* (*Capra Jerdoni*): found on the hill of that name, and upon other hills in its neighbourhood, viz., on the right bank of the Indus.

Horns perfectly straight, round at base, with a spiral groove running round them from base to tip. This animal is considerably smaller than the preceding, and his beard and mane are less developed.

General Kinloch believed, when he wrote his book, that the largest head ever obtained on the Sheik Budin hill measured only 32 inches. He considers a head of 24 inches a fair specimen.

3. *Spiral-horned.—The Markhor of Astor, Gilgit, Chilas, etc.* Spiral much more open than No. 1, and with seldom more than one complete turn. The animal is somewhat larger than No. 1. Horns of both No. 1 and No. 3 measure much the same, viz., from 40 inches (good head) up to upwards of 5 feet in length, though it is but very rarely in these days that horns above 50 inches in length are bagged.

4. *Straight-horned.—The Markhor of Northern Afghanistan.* Horns heavier and longer than those of Sheik Budin, and the twist more accentuated. This animal is larger than his congener of Sheik Budin, and is more like Nos. 1 and 3 in general appearance.

Horns up to 39$\frac{3}{8}$ inches are recorded by Rowland Ward, as also a single horn of 48$\frac{1}{2}$ inches, but heads of 30 inches and over are worth bagging.

Rare as are large heads of markhor in the localities inhabited by them which are open to European sportsmen, the difficulties of the chase of this fine animal are greatly enhanced by the fact that not only does he inhabit the most dangerous ground, but he delights, in Cashmere at least, in precipices amidst rocky forests in which it is extremely difficult to see him.

Writing so long ago as 1883, with reference to markhor shooting, Colonel Ward states that he should consider himself "well repaid by obtaining one fair shot for each fortnight on the shooting ground."

The Sheik Budin markhor, however, is far less difficult to find, since the hills which he inhabits are practically destitute of forest; but there, too, exists plenty of ground so dangerous that, should the markhor take to it, the sportsman cannot follow them.

The Astor markhor frequents open ground for the most part, but very little of the country inhabited by him is free to European sportsmen, and, of course, Afghanistan also is impenetrable by anyone who values his life.

The sportsman who may desire to bag markhor should read General Kinloch's and Colonel Ward's books mentioned in dealing with ibex, and should also bear in mind that only by the exercise of

infinite patience and perseverance, can he venture to hope for success.

The vernacular names for this animal are—

In Afghanistan, Cashmere, etc.—Mar-khor.

Ladakhi—Rá-che or Ra-pho-che.

THE TAHR (*Capra vel Hemitragus Jemlaicus*)

The tahr is a fine wild goat which stands from 9 to 10 hands in height at the shoulder. In colour, the male varies from light yellowish brown to dark brown; he has no beard, but he carries a splendid mane which springs from the fore-quarters and neck, and hangs down to (occasionally) as far as the knees.

The smell of the male is extremely potent and most disagreeable.

The female is much smaller than is her consort, and in colour she is reddish brown above, and whitish below. Her horns are but small.

The horns of the male are triangular in shape, with the sharp edges to the front. They seldom exceed 14 inches in length, even in the largest specimens, and a head of 12 inches is worth preserving.

Like the markhor, the tahr is fond of forest-clad precipices, and so he is not easy to find; and as, moreover, he inhabits very difficult and dangerous ground, while his trophies bear no comparison with the magnificent spoils of the markhor and the ibex, he is not nearly so much sought after as are the two latter.

The tahr is found throughout the Himalayas, at high elevations, from Cashmere to Bhootan. It is plentiful in Chamba and Gurwahl. Judging from General Kinloch's experience, it is a tough beast, and well-placed lead is necessary in order to bring it to bag.

The same author names as the best times for hunting tahr, the early spring when fodder is scarce, and the rutting season, at both of which periods the old males come out upon the open slopes.

The vernacular names for this animal are—

Near Simla—Tehr and Jehr.
In Nepaul—Jharal.
In Cashmere—Kras and Jagla.
In Kulu—Kart.
In Kunawar—(male) Jhula, (female) Tharni or Thar.
On the Sutlej, above Chini—(male) Esbu, (female) Esbi.

THE GOORAL (*Nemorhædus Goral*)

The gooral, or Himalayan chamois, is found throughout the Himalayas, at low elevations not as a rule exceeding 8000 feet. It is fond of heat, and inhabiting, as it does, the lower portions of the valleys, is found in very steep and difficult ground, the cover clothing the slopes at low elevations imposing an additional difficulty upon its pursuit. Gooral are not gregarious, but two or three are often found together.

This animal is only some 26 inches in height, and as its horns do not often exceed 8 inches in length, it is not much sought for, being consequently found at no great distance from various hill stations and in the close vicinity of villages. In colour, it is brownish grey with a dark line down the spine. Both sexes having small horns, the white spot on the throat, which is more marked in the male than in the female, is said to be the most distinguishable mark for determining the sex of these animals when seen at even a short distance off.

The pursuit of the gooral is recommended as training both in cragsmanship and in shooting, for, as well as inhabiting very difficult ground, it affords but a very small mark for the rifle.

The vernacular names for this animal are—

Pahari—Goral.
Kashmiri—Pijur, Rein or Rom.
In the Sutlej valley—Sah or Sarr.
Lepcha—Suh-ging.
Bhootia—Ra-giyu.

THE SEROW (*Nemorhædus Bubalinus*)

Of this rare animal—no doubt more seldom seen because he leads a solitary life, and is partial to steep rocky forests—General Kinloch says:—"The Serow is an ungainly-looking animal, combining the characteristics of the cow, the donkey, the pig, and the goat. It is a large and powerful beast,

considerably larger than a tahr, and longer in the leg. The body is covered with very coarse hair, which assumes the appearance of a bristly mane on the neck and shoulders, and gives the beast a ferocious appearance, which does not belie its disposition."

"The colour is a dull black on the back, bright red on the sides, and white underneath, the legs also being dirty white. The ears are very large, the muzzle is coarse, and the two singular circular orifices are situated two or three inches below the eyes."

In height this animal measures about, or a little more than three feet at the shoulder. It has short, annulated horns, of about the same length in both sexes; and the longest horn of which I can find any authentic measurement is Mr, A. O. Hume's head of 12¼ inches, quoted as the record by Rowland Ward in his latest edition.

The serow is seldom found when looked for, and perhaps is but seldom specially sought, being generally met with, and occasionally bagged, when the sportsman is in pursuit of other game.

General Kinloch made one short trip into Cashmere with the special object of shooting serow, and bagged but one. An injury to his foot, however, laid him up for a fortnight of the best time which he spent upon the ground. He, Colonel Ward, and other writers all agree that the serow, when wounded, will fight, and so due caution should be exercised when dealing with a wounded animal.

A serow, when disturbed, invariably gallops downhill and travels for a long distance before stopping.

The vernacular names for this animal are—

Pahari—Serow or Serowa.
On the Sutlej—Eimu.
Kashmiri—Ramu, Halj, and Salabhir.
Leesaws of the Sanda Valley—Nga.
The Shans—Paypa.
Chinese of Burmo—Chinese frontier—Shanli.

CHAPTER XVII.

SOME BRIEF NOTES ON THE WILD SHEEP OF INDIA AND THE HIMALAYAS

1. The Ovis Ammon or Nyan (*Ovis Hodgsoni*)
2. The Burhel (*Ovis Nahura vel Burhel*)
3. The Shapoo (*Ovis Vignei*)
4. The Oorial (*Ovis Cycloceros*)

THE OVIS AMMON OR NYAN (*Ovis Hodgsoni*)

THIS splendid wild sheep, which is so closely allied to other similar forms inhabiting Northern and Central Asia, as to suggest that the differences between them and it are no greater than can be accounted for by diversities in habitat and in food, is found in austere Thibet. The flesh of this sheep is tender, and excellent for the table.

General Kinloch thus graphically describes the country inhabited by this animal :—

"On the wild, bleak uplands of Thibet, where for hundreds of miles not a tree is to be met with; where in every direction, as far as the eye can reach, there is nothing but a vast expanse of barren soil, rock, and snow; where there is no shelter from the glare of a cloudless noon, nor from the freezing winds that sweep the naked hills with relentless

force towards the close of day; here in the midst of solitude and desolation, where animal life has apparently to struggle for existence under every disadvantage, is the home of this great wild sheep."

The same author states that "a full-grown male stands upwards of 12 hands at the shoulder," and is superior in size to the *Ovis Poli* of Central Asia, the horns of the latter being longer and thinner than those of the nyan.

He further states that "the colour of the upper part of the body is a dark earthy brown, becoming lighter towards the lower parts. The rump is light-coloured, and the tail is only about an inch in length. The throat and chest are adorned by a white ruff, the hairs of which are considerably lengthened; those on the body being short, brittle, and very close set."

The record head of an *Ovis Ammon* is, according to Rowland Ward, a magnificent trophy whose horns along the curve measure no less than 57, their girth being 18¾, and the distance between the tips 29 inches respectively. This head came from Ladak.

The next largest quoted by him, which was obtained near the Pangong lake, measures only 50½ inches along the curve. He produces, however, a long list of heads of 40 inches and over. General Kinloch states that "the average size of a full-grown ram's horns may be stated at about 40 inches by 17,"—viz., the size of the largest head bagged by him. The female carries small horns.

The white ruff of the male is a striking feature which can be seen at a great distance. *Ovis Ammon* are extremely wary animals, and so intensely acute is their sense of smell, that they are most difficult to stalk on account of the treacherous nature of the wind in Thibet.

Colonel Ward recommends patience in working ground, to reach which the sportsman has marched some hundreds of miles, and which ought not, therefore, to be disturbed on cloudy or gusty days.

General Kinloch, with his vast experience in stalking Himalayan game, considers a male nyan as by far the most difficult animal amongst them all to circumvent. In addition to the difficulty of approaching within shot of nyan which have been viewed, it is further very hard to find the old rams in the summer as they exhibit a strongly-marked penchant for certain pet spots, so that the sportsman may pass near their haunts without seeing the game of which he is in search, though females and young may be daily met with. At this season the old rams, leaving the ewes to their own devices, live apart from the latter in their favourite, often circumscribed, localities.

Any sportsman who may contemplate an expedition in search of nyan, should obtain and carefully study General A. A. A. Kinloch's *Large Game Shooting, Thibet and Northern India;* as well as Colonel Ward's, *The Sportsman's Guide to Kashmir and Ladak*, etc., under the chastening, and I trust pessimistic, light of the latter's *The*

Tourist's and Sportsman's Guide to Kashmir and Ladak.

The Thibetan names for this sheep are—

Hyan, Nuan, Nyan, Niar, Niaud, or Gnow.

THE BURHEL (*Ovis Nahura vel Burhel*)

The native name applied in the Himalayas to this wild sheep is thus variously anglicised by different authors—by General Kinloch as "Burrell"; by Jerdon, Colonel A. E. Ward, and Sterndale as "Burhel"; by Colonel Heber Percy as "Burrel," and by Rowland Ward as "Bharal."

The habitat of the burhel in the Himalayas is from Ladakh to Bhootan, and Kinloch states that it is probably not found below 10,000 feet elevation; he personally knows that it inhabits Ladak, Spiti, Gurwahl, Kumaon, the vicinities of the Niti and Chor Hoti passes, and the valleys towards the upper waters of the Indus and Sutlej. Burhel are found at as high an elevation as 17,000 feet, and Colonel Heber Percy has seen this sheep and the Himalayan ibex in the same place, and he states that they are generally found upon broken ground at no great distance from rocky cliffs, and are moreover adepts at climbing.

Kinloch says, "In a word, what they delight in is good grazing ground in the immediate vicinity of rocky fastnesses, to which they can immediately betake themselves when disturbed."

Burhel are found in herds, though in summer the

majority of the males separate from the females. Sterndale's description of this animal is as follows:—"General colour a dull slaty blue, slightly tinged with fawn; the belly, edge of buttocks, and tail, white; throat, chest, front of forearm and cannon bone, a line along the flank dividing the darker tint from the belly, the edge of the hind limbs and the tip of the tail, deep black; horns moderately smooth, with a few wrinkles, rounded, nearly touching at the base, directed upwards, backwards and outwards, the points being turned forwards and inwards. The female is smaller, the black marks smaller and of less extent; small, straight, slightly recurved horns; nose straighter. The young are darker and browner."

General Kinloch's description, which differs considerably from Sterndale's, is:—"The colour is a light bluish grey above, and white beneath. The chest and throat, the legs, and a line along the side separating the grey from the white, are jet black."

The burhel stands from 30 to 36 inches in height, the females being disproportionately smaller than the rams. Although burhel frequent bare ground carrying no cover with the exception of rocks, their colour assimilates so well with that of their surroundings, that they are very hard to detect when they are lying motionless.

Colonel Ward points out the great utility of a pair of good Baltistan dogs in recovering wounded burhel; and the *Sportsman's Guide* gives many localities for this sheep. The meat of the burhel

is excellent, both Kinloch and Ward speaking of it in highly laudatory terms.

In *Horn Measurements*, the best head of which detailed information is forthcoming is one from Ladakh, measuring 31½ inches in length of horns, the girth of the latter being 13½ inches, but a head of 23 inches and above is a fine one.

The vernacular names for this animal are—

In the Himalayas—Burhel, Buroot.
In Thibet and Ladakh—Napu, Na or Sna.
In Nepaul—Nervati.
On the Sutlej—Wa or War.

THE SHAPOO (*Ovis Vignei*)

This animal, which is called the "Oorin" in Boonjie and Astor, inhabits Ladakh and Little Thibet at elevations varying between 12,000 and 14,000 feet.

It stands from about three feet to a little more in height.

In colour the shapoo is brownish grey, growing paler below, till it meets the belly, which is white. It is sometimes termed by sportsmen the "red sheep," in contradistinction to the burhel or "blue sheep."

Colonel Heber Percy in the Badminton volume gives a good description of the extreme restlessness which pervades the nervous economy of this creature, regarding which he says, "there is not an animal in the whole of the Himalayas so vexa-

tious to hunt." Shapoo can travel over rocky, rough ground with ease.

Colonel Ward's *Sportsman's Guide* should be consulted for localities. The migration of these animals in the winter from Astor to the Boonjie plain, renders the latter a sure find in April.

The best head quoted in *Horn Measurements* measures in length of horn 39, in girth of same 11¾, and in distance between tips 15½ inches respectively. Colonel Ward considers an average horn about 26, and a good one anything above 29 inches in length. The female has small horns.

The vernacular names for this sheep are Sha and Shapoo.

THE OORIAL (*Ovis Cycloceros*)

This animal, sometimes known as "the Punjab wild sheep," is found upon the Salt range, the Suleiman range, the Hazarah hills, etc., in that part of India. In the ravines of the low rocky hills frequented by this creature, Kinloch describes the heat in summer at midday as probably as great as could be found anywhere in the whole world, "the temperature frequently attaining something very like furnace heat." The cold weather from November to end of January should therefore be chosen for the pursuit of oorial.

The male stands about three feet at the shoulder, the female being very much smaller.

The following is Sterndale's description of this animal:—"General colour, rufous brown; face

livid, side of mouth and chin white; a long, thick black beard mixed with white hairs from throat to breast, reaching to the knees; legs below knees and feet white; belly white, a blotch on the flanks; outside of legs and a lateral line blackish. The horns of the male are sub-triangular, much compressed laterally and posteriorly; in fact, one may say concave at the sides, that is, from the base of the horn to about one half; transversely sulcated; curving outwards, and returning inward towards the face; points convergent. The female is more uniform, pale brown with whitish belly; no beard and short, straight horns."

The ground frequented by this sheep is usually bare and stony, occasionally supporting scrub and bushes, and sometimes precipitous. The country inhabited by oorial is also used by the native shepherd for grazing his sheep, so that the wild animals are kept pretty much on the move.

As in the case of the other wild sheep, the males to a great extent separate from the females in summer. Colonel Heber Percy says that "a 30-inch ram on the Salt range is now a rarity," and the largest head mentioned by Rowland Ward is one which measures in length 39, in girth 10¾, and between the tips 18¼ inches respectively. This head came from the Punjab, but the precise locality is not stated.

Several fine heads, running from one inch less than the above down to 30 inches are quoted; but the largest from the Salt range measures but 33½

inches. Any head of 24 inches and over is worth bagging.

The vernacular names for this animal are—

In the Punjab—Oorial or Ooria.

In the Suleiman range—Roch or Ruch.

CHAPTER XVIII.

THE INDIAN AND THIBETAN ANTELOPES AND GAZELLES

THE INDIAN ANTELOPE (*Antilope Bezoartica*)

THE mature male of the Indian antelope, or Sasin antelope (*Antilope Bezoartica*), which is called the "black buck," is one of the most beautiful and most graceful animals in India—in fact, in the world. He is found under suitable conditions in the plains in many portions of each of the presidencies of our vast dependency. His spouse—the homely, hornless, fawn-coloured doe—is not nearly so conspicuous an animal as is her black-robed lord, the snowy whiteness of whose under parts stands out in glaring contrast to the ebon hue of the remainder of his body, and whose artistically-twisted and closely-ringed horns—which are of great length in comparison with the size of the animal, whose height is only about 32 inches—are a fitting finish to the handsome attire of this most elegant and very striking creature.

Whether we see him lying down taking his ease in the midst of his harem, or walking proudly, with head erect, occasionally pursuing and driving off a younger buck who has exhibited an in-

clination for flirtation, chasing a member of his own seraglio, or bounding along in the rear of the alarmed herd (for his superior weight enables his wives to outstrip him in speed), he is ever graceful, ever conspicuous, and a perfect Adonis amongst animals.

Personally I have shot black buck in only two parts of India, viz., a large number in Mysore; and eight in a single trip of only one whole, and two half-days' shooting, at Point Calimere on the south coast.

In both of these localities, the horns run very small as compared with the magnificent trophies obtainable in the North-West Provinces, and far better heads are to be found even in the district of Bellary which adjoins Mysore, than in any portion of the latter.

The biggest horn ever shot by me in Mysore measures only 19¾ inches, and I got that, and others very nearly as long, in the Chitaldroog district of that province.

In the district of Mysore (so called from the capital town of that name), where I was stationed for seven years, and in which I shot many buck, I never succeeded in bagging a longer horn than 17 inches, and I got only two animals with heads attaining that length. The average in that district was about 14 inches.

Heads measuring even a shade over 28 inches, are reported as having been shot in Northern India, but nothing approaching this extraordinary size has ever been bagged in any part of the South.

The best Southern India head which I have personally measured is one shot by Mr. M. (then of the 19th P.W.O. Hussars), who had previously killed only some three or four antelope, and was moreover quite a novice at game shooting with the rifle. This head was bagged at Guntakul, on the Southern Mahratta Railway, and it measured $22\frac{1}{4}$ inches.

Black buck horns are measured straight from base to tip, without following the curves, consequently a much curved horn, though often actually longer in the spiral than a very straight one, will show a smaller measurement than the latter.

Usually one horn is slightly longer than the other, and the measurement of the longer one is that accorded to the head.

In Mysore, an average herd of antelope consists of from ten to fifteen animals, including, as a rule, only one *black* buck and one or two young males as light in colour as the does.

The herds have their own beats, and, unless disturbed, are usually to be found upon the places generally frequented by them; but it is only very early in the morning that the sportsman can count upon their being in their usual haunts. He may, when later in the day he comes upon a favourite resort of the game, find a herd of cattle or sheep, with attendant noisy children (who yell vociferously as soon as they see antelope), upon the ground which he expected to find occupied by the objects of his pursuit. Needless to say, in such an event he may have to traverse a considerable area in his

search for the errant herd, and may after all fail to discover it.

In many localities which I know in the Mysore district, the herds are few and far between. The areas of uncultivated land frequented by them are moreover large. Sometimes a single herd frequents the waste land around the base of one of the low rocky hills which form so striking a feature of the Mysore country, or it may be that there are two or three such pieces of waste, a mile or more apart, with but one herd of antelope between them.

The wonder is, not that the antelope are comparatively scarce in Mysore, but that any of them exist at all, considering the number of natives belonging to meat-eating castes, and the constant war of extermination waged by them upon the unfortunate animals.

Just as in the District forests and parts of the State forests in Mysore, deer are being continually butchered by natives for the sake of their meat and skins, so in the open plains, by shooting and by snaring, the slaughter of antelope, without any regard to age or sex, goes on, unremittingly, merrily, and profitably so far as the poachers are concerned.

Of course the State is mainly to blame for this condition of affairs, since a wholesome check ought long ago to have been imposed upon indiscriminate slaughter by a little very necessary legislation.

When, in addition, one takes into account the number of wolves which, in the Mysore district at least, frequent the same ground as the antelope, it

is obvious that they, too, must take pretty heavy toll of the latter. Then again, the new-born kids are in danger of being killed by jackals and pariah dogs. Altogether, considering all his enemies, and the fact that he is continually being disturbed and moved about by cattle-herds and goat-herds as well as by villagers crossing the plains, or working in their fields at the edge of the latter, the life of a black buck must be rather too exciting to rouse the envy of anyone but a veritable fire-eater!

Although they inhabit tracts wherein they daily—sometimes hourly—see human beings, antelope are very wary animals, and as a rule require careful stalking. Still, it is occasionally possible to get a shot without making any attempt at concealment, where the ground is of such a nature as to render it impracticable for the sportsman to get out of sight. In such a case, he should walk boldly on, as if he were going to pass the herd at a distance, and gradually edge nearer and nearer, never stopping, and never looking at them (except out of the corner of his eye) until he is within range, when, having previously calculated the distance, he must take his shot without delay. Personally, I never fire a shot at such small game at a considerable range without sitting down. By sitting down, pressing the heels together, keeping the knees apart, and resting one elbow upon each knee, great steadiness can be obtained, and in firing running shots at antelope I prefer to assume this position, even after the game has commenced to bolt. When

shooting at the running deer at the Southern India Rifle Meeting, in Bangalore, I always shot in the sitting position, and I won a good many prizes at that target (unlimited entries), including at one meeting a highest possible in the single-barrel contest (seven single shots at 100 yards), upon which occasion I used a Government Martini-Henry rifle; and also, in the same meeting, a highest possible in the double-barrelled event (three pairs of double shots), in which I used a ·500 express rifle. The bull's-eye was six inches, but the deer was certainly running very slowly, whereas at the Bisley Meeting it travels at a high rate of speed.

Some few men are very steady shots in the standing position, as, for instance, Colonel W., so often mentioned in this book, who won the then *Daily Graphic* Seventy Guinea Cup at one Bisley Meeting with a score of thirty-four points out of a possible thirty-five, the distance being 200 yards, and the position *standing*. To beginners in game shooting, but experts at target shooting in the standing position, I would say by all means take the shot standing, for the act of sitting down *may*, though more often it does *not*, become the signal for the flight of the antelope; but all ordinary shots will do well to run the risk, and to take their shot at the game in a sitting position.

There is not much to fire at, the animal being very lightly made; and the sportsman should remember that a black buck is exceedingly tough, and if hit too far back, or if only a leg be broken,

the wretched beast often escapes to die a lingering death.

Very early in my antelope shooting days I had an extraordinary experience of their vitality, for which, to this day, I find it difficult to account. I was out shooting near Kadakal, which is only nine miles from the town of Mysore, and had ascended a hill rising abruptly from the plain, from which, with a telescope or binoculars, antelope can often be seen a long way off. With the naked eye we could see, far away in the plain, little clouds of dust rising first in one place and then in another, and the men said that these were due to bucks fighting, while the glass showed that such was the case. Descending the hill, I made a good stalk in, but arrived, rather too much pumped for steady shooting, within easy shot of the pair of bucks who were fighting most viciously and persistently. I fired at one and missed; they then bolted, and I fired again as they ran and hit one of them. Greatly to my surprise, the antelope ran only a short distance and then pulled up, and once more set to fighting furiously. So engrossed were they in their deadly duel that they allowed me to walk in quite close, and I then fired at and dropped one of them (I subsequently found that this was the one first wounded); and the other one, taking no notice of the shot, delivered another thrust with his horns at the fallen foe, whereupon I fired again and killed him also. Imagine my surprise when I found that both my bullets were most accurately placed upon the shoulder of the first buck slain, and either

of them would have sufficed to at once kill an antelope under ordinary circumstances. How that animal, thus wounded by a hollow express ·500 bore copper-tube bullet, could run a short way, pull up again, and continue fighting like a demon, I cannot understand. I can only surmise that the fact of his extreme rage enabled him to support a wound which would have floored him at once under ordinary conditions. But this has been a long digression, and I will now return to the subject of how to bag antelope.

It often happens, particularly in Mysore, that these animals are found on ground broken by ravines and nullahs, in some places clothed with bushes, and under such circumstances very pretty stalking can be enjoyed. A good pair of binoculars (or a telescope) to be carried by one of the men, and a pair of "Lilliput" binoculars, which can be taken in the sportsman's own pocket, are very necessary for use in antelope shooting.

The sportsman may need an aid to vision after he has left the men under cover (or in a nullah) while he proceeds by himself to stalk the game, and he will then find the "Lilliput" binoculars extremely useful.

In some places, the ground is so flat and bare, and the antelope so wary, that in order to circumvent them it is necessary to use a covered bullock cart. Antelope are quite accustomed to seeing cattle and carts, so that, unless they have learnt the trick, they will generally allow a cart to go quite close to them. I have only in two trips

adopted this somewhat poaching device, and that was on ground over which a friend in the Gunners had previously shot, and upon which he told me that I should have to employ it in order to obtain sport.

It was certainly very deadly in my first trip, one October, when in seventeen days' shooting I bagged twenty-four black bucks, one buck chinkara, and two bustard (the bustard being shot with the rifle). When, however, I went over the ground again, some two months later, the antelope would not let a cart approach anywhere near them; and I had hardly any sport, and what little I obtained was on foot. I believe, however, that this wildness of the game upon the occasion of my second trip, was due, not to their remembrance of my previous use of a cart, but to the alleged fact that a large gang of antelope netters and snarers had, just before my second visit, been harrying the ground and driving the animals about until they were ready to run from anything; and of course they could see a cart much farther off than they could detect a man.

The *modus operandi* in using a cart is, first, to put in some brushwood or straw, then a *thick* mattress and some pillows, and to cut two holes, one on each side, in the bamboo matting which forms the roof and sides of the covering, to serve as windows. The cart then goes lumbering along across country in places where antelope are likely to be found; and it is extraordinary what rough ground and what ticklish nullahs, a bullock-cart, if well driven, can cross without upsetting.

When a herd of antelope has been sighted, the cart should be headed as if to pass them on one side, and should they show any uneasiness and an inclination to move off, it should pursue a course as if to pass ahead of them, making the necessary détour for the purpose. Sometimes, animals, which have shown some alarm at the first approach of a cart, subsequently lose fear and afford an easy shot.

When the antelope have gained confidence, or should they have shown no alarm at the cart passing them in the first instance, the sportsman must, when approaching within range, drop out of the back of it when the bullocks' heads are turned towards the game; the cart should then turn off at an angle, while he advances under cover of its side. When near enough for a good shot, he should sit down while the cart goes on, and as soon as he has taken aim at the buck, fire at the shoulder of the latter.

Some beginners are very apt to "pull off" in the act of firing. If such will make a practice of using the *middle* finger put well round the trigger, in place of the forefinger, they will probably find a great improvement in their shooting. A bullet placed anywhere on or just behind the shoulder, though not too far back, will drop the buck either in his tracks, or after he has run but a short distance.

If, owing to a badly-placed bullet, the animal goes off wounded, it is far better, should the country admit of it, for the sportsman to watch him through his glasses, rather than at once pursue him. Then, if he should see the wounded animal

lie down, or enter a field of standing crop, the wiser course is to sit quiet for a time and watch, rather than risk losing the buck, as may easily happen should he press on and disturb the latter before his wound has had time to stiffen.

Sometimes, a small band, consisting entirely of young bucks, is met with, and occasionally also a fine old black male, who, from choice or from necessity, leads a single life, and such a one is usually exceedingly wary.

At times, too, a herd (or a single buck) may be found in such a position, that, while stalking is out of the question, there is a possibility of the game being driven to the sportsman. Perhaps the latter may have found the herd in the same place before, and have noticed the line which the animals took when disturbed. In such an event it is worth while to try a drive, the sportsman concealing himself behind any cover which may lie in their former line of retreat. Driving, however, except in preserves, is seldom successful, but the main point to impress, upon the two or three men who may be sent to perform the manœuvre, is that they should make a *very wide circuit*, and get far behind the game before attempting to advance towards it with the object of driving it forward.

Directly a buck has fallen to the shot, the sportsman should run up, and seizing him by one horn, turn his horns down backwards, and cut his throat. If he desires to preserve the head for subsequent mounting, he should take care to cut low down, so as to leave a long neck. He must, while

administering the *coup de grace*, avoid standing in such a position that the animal, if it be still alive, would be able to kick him.

Length of horn appears to be no criterion of age in the case of antelope. Frequently young brown bucks have fine horns—better sometimes than those carried by the majority of their black-coated brethren in the same locality.

A horse or pony is a very useful aid to the sportsman when out antelope shooting. Walking long distances over the hot plains is very trying, and frequently many miles must be covered in a day. Some men have ridden down a wounded buck till the latter has dropped from exhaustion, or have speared him from horseback, but I have personally never attempted either of these courses.

I have shot black buck chiefly with a double ·500 express rifle, using generally Eley's hollow copper-tube small bullet, weighing 340 grains; but I have also shot about twenty with a friend's double ·360 express rifle, and I found that the latter killed them well and cleanly. Upon this point, however, the experience of a Major in the 19th P.W.O. Hussars (who has shot a great number with his ·360) is somewhat at variance with my limited experience of antelope shooting with that bore, his opinion being that the ·360 is scarcely powerful enough to kill them satisfactorily. Sir Samuel Baker recommends a ·400 bore rifle for this game.

Though I have not yet used the weapon, except in a few entries one meeting at the running deer

target at Bisley, I have no doubt that a sporting double ·303 is *the* antelope gun of the future.

I once, with my Holland double ·500 express, made an extraordinary shot at antelope. Upon that occasion, a herd which I was attempting to stalk took alarm and fled, but as they took off down a nullah on my right, I saw a chance, by running, of cutting them off and obtaining a shot. I failed to do the former, for the herd had passed before I reached the nullah, but they pulled up to gaze. I was terribly breathless after my run, but knelt down and fired at the shoulder of *the* buck of the herd. At the shot he fell, as did also another buck standing behind him! I saw no other male with this herd. Upon that occasion I was using the large canelured copper-tube express bullet with a solid base, which weighs 440 grains, and is far superior in penetration to the ordinary hollow copper-tube bullet weighing 340 grains, for, while its front portion breaks up, its solid base carries on. In this particular instance, the bullet had smashed up upon the further shoulder, while the solid base, after going clean through the animal, broke the spine of buck number two who was standing behind the former.

I have killed a number of bucks by running shots, but have of course missed very many more. The great thing to remember in firing running shots at antelope is that you are hardly likely to miss *in front*, and that you can scarcely fire too far ahead of a buck going at full speed—say 200 or 250 yards off—across you. At a range of only 100

yards, the allowance necessary is less, and the chance a much better one. Success in running shots can only be attained by a combination of practice, observation, judgment and luck. Such attempts in the case of antelope are very instructive, since the sportsman can frequently see a cloud of dust knocked up by each bullet, and thus ascertain in which direction his error lay.

I once killed a single buck with my *seventh* shot, at very long range, as he was going off at full speed. He had started in another direction, but turning back on meeting a villager, came past me again, and the fatal bullet caught him just as he was disappearing from view.

If it be intended to preserve the head of a black buck for mounting, the removal of the mask should be effected with as little delay as possible. The only incisions required after the head has been severed from the body—of course leaving a long neck—are one up the back of the neck to the centre of the top of the head, and, from its termination, two very short ones, viz., one to the base of each horn. The skin can then be removed without difficulty, care being taken, however, not to allow the knife to slip through the skin near the eyes, nostrils and lips. All adherent muscles must then be removed from the skin, and either arsenical soap or carbolic acid applied to all these parts both inside and outside. The mask can then be dried in the sun, being occasionally turned so as to dry both surfaces, a wisp of straw or hay being meanwhile placed inside to keep it open.

Whether it be intended to preserve the head for stuffing, or only to keep the skull and horns, the latter must be removed from their bony cores, and this cannot be done till a few days after the animal's death. The best plan, as soon as the horns can be removed, is to rinse them out with common, cheap carbolic acid, and also to paint the cores with the same. Care must be taken, in boiling the head in order to remove the flesh, that the water is not deep enough to cause immersion of portions of the horns, and the boiling should be carried no further than is necessary for effecting the object in view. Of course, should it be intended to preserve the head for mounting, the lower jaw-bone must be carefully kept. The body-skin of an antelope, if pegged out in the sun, will dry in a few hours. Nothing need be applied to it, except a coating of wood ashes, while it is lying exposed with its raw side uppermost. This could not safely be done under a hotter sun than that of Mysore, as in the plains at lower elevations all drying of skins must be done in the *shade.*

The best locality for black buck in the Mysore province is the Chitaldroog district. This can be easily reached from the various railway stations on the Southern Mahratta Railway between Adjampur and Devangere. Other good localities in Southern India are parts of the Bellary district where the horns run larger than they do in Mysore. It would not, however, be worth the while of anyone who may intend later on to go to the north, to waste time in shooting antelope anywhere in the South of India.

The North-West Provinces generally, and particularly the Bikanir desert between Rajputana and the Punjab, are *the* home of the finest black buck to be found in India, and in the Hissar district, according to Jerdon on information received by him, vast herds, calculated at from 8,000 to 10,000, have long ago occasionally been seen in the Government cattle farm. Jerdon says that he has seen herds of some thousands together in the vicinity of Jalna in the Deccan.

Guzerat, in the Bombay presidency, is, I gather from private information received from a brother sportsman, a great place for antelope as well as for chinkara.

In the postscript to his splendid work, General Kinloch mentions having actually bagged a head on the borders of the Bikanir desert some ninety miles from Ferozepur, the horns of which measured 26¾ inches; and adds that amongst a herd containing some 1,500 animals, he saw a buck with horns far surpassing any which he has bagged or seen elsewhere, and states that he believes that he is quite within the mark in estimating them at not less than 29 inches. R. Ward quotes one head of 28¾, another of 28¼, and two of 28 inches respectively.

The venison of a Mysore black buck is excellent, in fact, far superior to the mutton of that country.

The principal vernacular names for this animal are—

Hindustani—(male) Harna, Harin; (female) Hirni.

In Tirhoot—(male) Kala; (female) Goria.
In Behar—(male) Kalsar; (female) Baoti.
In Bhagulpur—Bureta.
In Nepaul—Barout and Sasin.
Canarese—Hoolay-Kerra, Jinki.
Mahrathi—Hiru.
Telegu—Jinka, and (male) Irri; (female) Sedi.

THE INDIAN GAZELLE

CHIKARA, OR RAVINE DEER (*Gazella Bennetti*)

This pretty little animal appears to be more local than is the Indian antelope, but in many places is found upon precisely the same ground, though the chikara usually confines itself to such portions thereof as may be covered by bushes, or in which ravines occur. Its height at the shoulder is only about 2 feet 2 inches in the case of a buck, and the latter's horns vary from 12 to 14 inches in length. They are annulated, but are not spiral as in the case of the black buck, and, unlike those of the latter, they curve forward at the tips. In colour the chikara is deep red-fawn, with the lower parts and buttocks white.

Personally, I have never seen more than three or four together, but my experience of chikara is limited to two trips in a part of Mysore in which these animals and antelope occupy the same ground.

At first sight, a buck chikara might be mistaken for a young buck antelope, but he is in reality

easily distinguishable by the redder colour of his skin, and by the perpetual motion of his tail which he is continually wagging.

Chikara appear to be far more fidgety and restless than are antelope, and it is often difficult to get a shot at them when found in high bushes. They should, however, always be followed up, as they may give a chance even after having been more than once alarmed. Unlike the doe antelope, which is hornless, the female gazelle has tiny, thin horns—as a rule only 4 or 5 inches in length—which are not ringed like those of the buck.

When a chikara has gone off wounded (and the vitality of this animal is wonderful), I have found it a very difficult matter to get another shot at him, in spite of profuse bleeding, and although he has been obliged to lie down at frequent intervals, on account of the jungled character of the ground which he inhabits.

The vernacular names for the Indian gazelle are—

Hindustani—Chikara, Kal-punch.

Canarese — Chit-hoolay, Sunk-hoolay, Tiska, Budari.

In Punjab—Hirni.

Mahrathi—Kal-sipi.

Telegu—Barudu-Jinka.

THE NILGHAIE (*Portax pictus*)

The male of this antelope stands from 13 to 14½ hands at the shoulder. He carries but an insignificant trophy, his horns being but from 8 to 10 inches in length. The male is of a blue-grey colour, and hence its name of nilghaie (*e.g.*, blue cow), while the female is of a sandy or tawny hue.

The nilghaie is generally distributed over India, but is not found in Mysore and other parts of the extreme south. His habitat is open country, with scrub or sparse tree jungle, and he is not worth shooting.

The vernacular names for this animal are—

Hindustani — Nilghao, Nilghaie, Lilghao, Lilghaie.

Canarese—Maravi.

Goudi—Guraya.

Telegu—Manupotu.

THE THIBETAN ANTELOPE (*Pantholops Hodgsonii*)

This antelope is found on the desolate, dreary plains and valleys of Thibet, at very high elevations. The buck is a larger and heavier animal than is the black buck, and varies in colour from whitish or light fawn to pale red, while the puffy, swollen muzzle gives him a very peculiar appearance.

The Chung Chenmo valley in Thibet and its neighbourhood, is the locality wherein this antelope is generally shot by English sportsmen.

Colonel Ward has never seen it at a less elevation than 14,800, or at a higher one than between 18,000 and 19,000 feet.

The does are hornless, and are much smaller than the bucks. The horns of the buck are jet black, close grained, and deeply notched on their anterior surfaces.

Colonel Ward's best head carried horns measuring 26½ inches in length, and General Kinloch's best, out of twenty-five heads bagged, measured two inches less. The latter *heard* of a pair of horns measuring 28½ inches, but, as he did not see them himself, this is hearsay evidence. Rowland Ward quotes horns up to 27¾ inches; while Colonel Ward, who also writes with great authority, does not think that the *average* length of the horns of a mature buck can be considered as exceeding 22 inches. The skin is useless.

The vernacular names for this animal are—

In Nepaul—Chiru.

In Thibet—Isos, Isors, and Choos.

THE THIBETAN GAZELLE (*Gazella picticaudata*)

This beautiful little gazelle, which stands only about two feet in height, is in winter, when the hair is long, grizzled-fawn in colour, with dirty-white under parts; while in summer, when the coat is short, it is much darker in hue.

The goa, as this animal is called in Thibet, inhabits barren, bleak uplands at very high elevations, the vicinity of the Tsomoriri lake along the Chinese frontier in Ladak, and Hanle, being named as localities for it by Kinloch and Ward.

From 13 to 13½ inches is the measurement of a good pair of horns of this species.

THE FOUR-HORNED ANTELOPE

(*Tetraceros quadricornis*)

This antelope has a wide distribution throughout India from the foot of the Himalayas to the extreme south. In Mysore, the two-horned variety, known as Elliott's antelope, is more common than is a perfect head with the four horns developed, though both forms occur there.

In a fine specimen of the perfect type, the posterior horns measure 4 or 5 inches in length; while the anterior do not exceed 1½ inches, and are usually much less.

This antelope measures only 2 feet, or 2 feet 2 inches in height at the shoulder. It is, in Mysore, met with alike in the dense tree and bamboo forests of the low country, as in the lighter jungles clothing the slopes of hills. It is very frequently allowed to pass unscathed, owing to its being accidentally encountered when the sportsman is in pursuit of larger game. It is always well worth shooting when there is no objection to firing a shot for fear of disturbing more

worthy game, owing to the excellent quality of its venison. It is, when at some little distance, easily mistaken for the muntjac (or barking deer), but it is yellower and less ruddy in hue than is the latter, and is also somewhat smaller.

I have found four-horned antelope both singly and in pairs, and it is obvious from the collections of dung found in any particular place which one of these animals may have chosen as his home, that he returns to the same place for the purpose of defecating—a peculiarity which, so far as I am aware, is shared by no other wild animal except the rhinoceros.

A ·500 express hollow bullet makes a terrible mess of one of these little antelopes, but the sportsman has seldom anything very much lighter with him when shooting in the jungles which they inhabit.

The vernacular names for the four-horned antelope are—

Hindustani—Char-singha, Chou-singha, Jungli-buckra.

Canarese—Kard-coorie.

Telegu—Konda-gori.

Gondi—Bhir-kura (male), Bhir (female).

Note.—The names Jungli-buckra and Kard-coorie are in Mysore applied indiscriminately to this animal and to the muntjac (*Cervulus aureus*).

THE TAKIN (*Budorcas taxicolor*)

This curious animal, though at present but little known to European sportsmen, inhabits, amongst other places, the Mishini hills on the northern side of the valley of Assam. It is also found in Chinese Thibet, and in the Akha hills north of Assam. Specimens have been procured from the Mishinis near Sudiya on the Assam frontier. It inhabits precipitous ground, is heavily built, and stands about 3½ feet in height at the shoulder. It is, at least in one stage, of a tawny ground colour, with legs, tail, muzzle, and dorsal stripe black.

The horns are very peculiar in shape, twisted into a somewhat bovine form, with a strong superficial suggestion of a resemblance to those of the gnu of Africa. They are very thick, and measure up to about 24 inches in length.

Mention is made here of this animal only because some portions of the area inhabited by it may at any time become accessible to sportsmen, though at present it would be suicidal for an Englishman to attempt to penetrate it.

The vernacular names for the Takin are Takin, or Takhon, pronounced nasally.

CHAPTER XIX.

THE RHINOCEROTIDÆ AND SUIDÆ OF INDIA

THE GREAT INDIAN RHINOCEROS

(*Rhinoceros Indicus*)

THIS huge animal measures, in the case of a large male, from 5 to 6 feet in height, and the single horn, which is common to both sexes, though rarely as much as 2 feet in length, seldom attains more than one half that size.

It inhabits the Terai, at the foot of the Himalayas, from Bhootan to Nepaul, and is very abundant in Assam and the Bhootan Dooars, frequenting swampy ground and dense jungles. It has a habit of depositing its dung in the same spot, of which fact the native shikarrie takes a somewhat mean advantage.

The peculiar tuberculated hide, with its huge folds and plates, irresistibly calls to mind the plated armour of bygone ages.

In the valley of Assam, where the soil is all alluvial, and stones conspicuous by their total absence, the mighty Brahmaputra river is at the present day, as in the ages that have passed, continually shifting its bed. What is this year a high sandbank clothed with dense jungle, may not im-

probably, in the floods of next rainy season, be washed away, and the place thereof become part of the bed of the river.

Great fertility is the natural result, and in consequence a very high, dense growth of reeds and grass covers all the low-lying portions of the valley, often presenting a huge unbroken expanse over a very large area, and reaching in places a height of twenty feet or more. Then too, there are large and densely jungled churs (or islands) left in the river when the latter has fallen to its dry season level, and these often afford excellent shooting.

Assam is *par excellence* the home of the great Indian rhinoceros, and in suitable localities his large three-toed and unmistakable track will generally be found.

Owing to the nature of the jungle, and the great height and density of the huge seas of reed and grass (often matted with creepers) which cover the low-lying portions of the valley, rhinoceros can, as a rule, be hunted with any prospect of success only by sportsmen mounted upon elephants, with a number of those animals in attendance to act as beaters. Of course, a great variety of game is met with and shot while beating these vast expanses and the churs, since not only rhino, but tiger, buffalo, panther, pig, and deer of several species are found therein.

The best season for sport in Assam is the cold weather—say from November 1st to January 31st—and that period is a very pleasant one there. Of course, though the nights and mornings are

chilly, the sun is very hot by day, and a big, thick sola topee is essential as a protection to the head against its rays. The best advice which I can give to any sportsman who may desire to shoot in Assam, and who knows no one there, is to go up to the hill-station of Shillong about October, call round the station, make inquiries, visit any planters or officials in the valley below of whom he may hear as being keen upon sport (he will find the planters a fine, manly, hospitable and kindly set of men), and try to join some one of the parties which may be going out. The journey is an easy one from Calcutta, and rail and steamer will take him almost to the foot of the Cossya hills on which Shillong stands. He can go either up or down the valley by steamer, and from Dibrugarh in Upper Assam, to Sudiya on the frontier, there is a line of rail which has been constructed since I left that part of India.

Of course this method of shooting is expensive owing to the number of elephants which must be employed. The more elephants there are, the longer the line, and the wider the area which can be beaten.

I have heard of very fine bags of tigers made upon the Brahmaputra churs. A pair of 8-bore Paradox guns is the best battery for rhino.

R. Ward quotes one horn of 24, one of 19⅛, one of 19, and two horns of female specimens as measuring 16¼, and 16 inches respectively. These are all very large measurements, and a

specimen of 12 inches in length is well worth bagging.

The vernacular names for the rhinoceros are—

Hindustani—Genda, Gonda, Ganda, or Genra.

Assamese—Gor.

THE JAVAN RHINOCEROS (*Rhinoceros Sondaicus*)

This animal, though called by Jerdon "the lesser Indian rhinoceros," is of much the same height as *Rhinoceros Indicus*. It inhabits parts of India, *e.g.*, the Sunderbunds, Burmah, and Tipperah, and according to Sterndale, who cites Pollock as his authority, Assam. Of this species only the males are horned.

Sterndale mentions two other species of rhinoceros, viz., *Rhinoceros Lasiotis*, inhabiting Arakan and Tenasserim, and *Rhinoceros Sumatrensis*, a small, yet very long-horned species inhabiting Tenasserim, Burmah, Siam, the Malayan peninsula, and Sumatra. Both of these two, unlike *Rhinoceros Indicus* and *Rhinoceros Sondaicus* which each have but one horn, are two-horned.

Jerdon, excluding *Rhinoceros Lasiotis* altogether, mentions *Rhinoceros Sumatrensis*, which he calls "*Rhinoceros Sumatranus*," and about which, as regards India, he only says that it "is suspected by Blyth to extend as far north as Assam."

The vernacular names for the Javan rhinoceros are the same as for the last, with the following additions :

Burmese—Khyen-hsen.

Malayan—Badak.

THE WILD BOAR (*Sus Indicus*)

This animal, perhaps the most courageous, determined, and short-tempered of all the denizens of the Indian jungle, is found throughout the latter at all elevations from zero up to (according to Jerdon) 12,000 feet. The largest boars stand some 36 inches or more in height, and their formidable and extremely sharp tushes, which often attain the length of 9 inches, have (according to R. Ward) been even obtained as large as 14¾ inches. These, the animal can use with terrible effect, as many a tiger has discovered to his cost when he has ventured to try conclusions with an old boar, whose wives and progeny form a very favourite and succulent food of the jungle tyrant. In these encounters, the tiger has often been worsted, and even occasionally killed by his well-armed and powerful antagonist.

General Kinloch relates a terrible experience of his own when out "pig-sticking," and his recovery was little short of marvellous, since he was horribly ripped, and covered with some fifty wounds from the tusks of a boar which had upset his horse, and then devoted his energies to the dismounted officer.

In parts of India, in which, from the nature of the ground, spearing boars from horseback is practicable, the latter is the only way in which a European will kill them. In fact, in such localities

and their vicinities, shooting a pig is as serious a crime in the eyes of sportsmen as vulpicide in a hunting county at home; and pig-stickers, like fox-hunters, become so sentimental upon the subject, that nothing short of self-preservation would induce them to shoot their favourite game *anywhere*, however impossible the country might be for the prosecution of the legitimate sport.

The late Sir J. D. G., who was a good all-round sportsman and devoted pig-sticker, was upon one occasion beating sholahs with a friend of mine on the Neilgherries (where pig-sticking is never attempted) for sambur and muntjac.

During one of the beats, a big boar dashed straight down the path on which Sir J. was posted, and directly towards him. Sir J. could not *bear* the idea of shooting the animal, but he well knew that the pig would not move an inch out of his way, but would, if permitted, certainly cut him over; so when the owner of those wicked, little, twinkling eyes, and dentine razors, was close upon him, he shot him dead, thus incurring a good deal of subsequent chaff, I believe, since his opinions upon the subject of pig-shooting were well known, as he did not hesitate to express them.

I have, upon more than one occasion, when bison shooting, at times too when to have fired a shot at other game would inevitably have ruined my chance of success with the nobler animal, been menaced with a charge by a boar, which, however, in the two instances which occur to my memory, went off at last without attacking me. Had the beast in either

instance charged me, I should of course have been compelled to shoot him.

Some vernacular names of this animal are—

Hundustani—Soor, Bara-janwar, Kala-janwar.
Canarese—Hundi.
Mahrathi—Dukar.
Telegu—Pandi.

THE PIGMY HOG (*Porcula salvania*)

This tiny animal, which is said by Mr. Hodgson to resemble in size and shape a young one of the preceding species of about a month old, weighs only from seven to ten pounds. Its habitat is the saul forests of Sikkim, and the Nepaul Terai. Hodgson says "the colour of the animal is a black brown, shaded vaguely with dirty amber or rusty red." According to the same author, the pigmy hog goes in herds, and the males will courageously attack intruders, "charging and cutting the naked legs of their human or other attackers with a speed that baffles the eyesight, and a spirit which their straight, sharp laniaries render really perplexing, if not dangerous."

The vernacular names for this animal are—

Hindustani—Chota-soor.
Nepaulese—Sano-banel.

CHAPTER XX.

POACHERS AND NUISANCES

IN this list, various animals which prey upon others will not be included; some because they themselves afford coveted trophies, and are therefore amongst the most valued game of the Indian sportsman, as the tiger and the panther; others, again, are omitted on account of their rarity, which, however bloodthirsty and successful a poacher each individual may be, renders the total damage to game, which is perpetrated by the whole species, of small comparative practical importance. Take, for instance, the Indian and Thibetan lynxes, and also the Thibetan wolf (or chanko), which last is, moreover, so well supplied with tame mutton, as to rarely trouble himself to hunt for the sparsely-distributed and extremely wary game animals which roam the vast, inhospitable wastes of bleak Thibet.

Of the multitude of poachers which harry the many species of large and small game in the continent of India, I am doubtful whether I ought to award the palm for destructive power to the Indian wild dog (*Cuon rutilans*), or to the class of native whose object it is to slay, by any means

in his power, and utterly regardless of both sex and age, any animals, the flesh of which may command a ready sale in his vicinity. The injury done to the head of game by both is incalculable; but, inasmuch as the native is always at work, quietly and unostentatiously, slaying, without, as a rule, driving the game out of the sphere of his operations, while the terror which is inspired by a pack of wild dogs, hunting in any particular tract of forest, is such as to denude that tract temporarily of all its *feræ naturæ* and so to necessarily limit the operations of the canine poachers to an occasional visit, I am inclined to think that the human poachers are even greater curses to the sportsman than are the dogs. I will therefore deal first with the poaching native. Generally he possesses a gun—an antiquated, long-barrelled weapon as a rule, but one which, when loaded with several irregularly-shaped chunks of lead, a handful of slugs, or two bullets, does terrible execution at close quarters—and a native has far too keen an eye to the retention of what he possesses to risk even a charge of powder and lead unless he is morally certain of scoring. With his bare feet he can walk almost as noiselessly as a cat; practice has rendered both his eyesight and his sense of hearing exceedingly acute; he knows every water-hole, salt-lick, and glade in the jungles near his home (and his operations do not usually take him far afield); and this knowledge, together with his intimate acquaintance with the habits of the game, added to an unlimited store of patience, and a total disregard of the value

of time, constitute, with his afore-mentioned antiquated weapon and a few charges of powder and lead, a stock-in-trade which is amply sufficient for his purpose. For hours he will lie in ambush watching a water-hole, at which, in the hot and dry season, deer are wont to slake their thirst; or a salt-lick, whither they repair, especially in wet weather, to eat the salt earth; but let even a gravid hind or a young fawn approach his hiding place so close that to miss is well-nigh impossible, the murderous charge is launched, and the exulting poacher secures an animal whose flesh can be sold.

The time has undoubtedly come when a check should be put on this state of things by the imposition of gun and game licences, priced sufficiently high to prevent the majority of these poachers from incurring the expense of so large an outlay. In Mysore, as I have elsewhere stated, there is nothing to prevent anyone from entering even the State forests (except during the fire season) for the purpose of shooting; and the ridiculous cost of a gun licence (about fourpence) and the absence of any game regulations, enable the poacher to make a very comfortable living at the cost of very little exertion, and at an outlay in cash of almost nil.

There are many other human poachers, particularly gipsy-like wandering tribes, who do not use guns, but who are extremely expert in every conceivable device for capturing game, both large and small, and whose methods often combine great simplicity in form, with consummate ingenuity in design. Antelope are sometimes captured by the

turning out, on ground inhabited by wild herds, of a tame buck with nooses fastened to his horns. The natural pugnacity of a wild buck induces him to try conclusions with the intruder, with the result, of course, that the former's horns are entangled, and he is then easily despatched.

By this method, bucks only are taken, but another plan for the wholesale capture of the animals, without regard to sex or age, is practised with only too much success in parts of Mysore. A large number of natives, each with a long cord, to which at intervals nooses of strong gut are attached, proceed together to a place towards which the configuration of the ground renders it probable that a herd inhabiting the vicinity may be successfully driven. The cords are then firmly pegged down in a long and often double line (the second some yards behind the first), and the men, by making a very wide circuit, endeavour to get round the herd, and to drive it in the desired direction, when, should the operation prove successful, several of the animals are often caught by the legs, and promptly butchered by the poachers. Pit-falls, dead-fall traps, nooses set in various ways, and numberless devices, too manifold to enter upon here, are employed with variable success to reduce wild animals into possession; while the wholesale capture (by highly successful methods) of all edible game birds and wild fowl, forms a never-failing source of income to the professors of the art.

THE WILD DOG (*Cuon rutilans*)

Next, after the human poacher, the most destructive is the wild dog. This animal hunts by scent in packs, running mute; and seldom, indeed, is it that an animal upon whose track a pack of dogs has started, escapes. Unlike the wolf, the wild dog is quite untameable. I have seen a pack running upon a scent just like a pack of hounds, but quite mute. I fired at one, and hit it, and in following it up found a hind leg—which had evidently been shattered by the ·500 express bullet, and then bitten off by the wounded animal above the hock joint—lying on the track, but the dog escaped. I have a found a pack, out of which I shot one, in an open glade in the early morning, apparently enjoying the rising sun.

I have only upon one occasion seen a single dog by itself, but I once saw only four or five together upon the high road, though of course there may have been others belonging to the same pack in the adjoining jungle.

The wild dog stands from 17 to 20 inches in height, is of much the same general colour as a fox, and possesses a bushy red tail, though the latter is devoid of the white tip which forms so striking a finish to the brush of our "little red rover." The effect upon the game, of the advent of a pack of wild dogs in any tract of forest, is magical. As soon as a few head of deer have

been run down and eaten, all the game leaves the vicinity; and even the tiger—his food supply having moved off—is also forced to take his departure.

The wild dog attacks the flank of its quarry with the object of disembowelling it, and should the victim be a male, the testes are also a favourite *point d'appui*. Terrible, indeed, is the destruction of game by these scourges, and considering that the bitch gives birth to half a dozen pups in each litter, while, so far as I am aware, nature has imposed no limit whatsoever, except that of food supply, upon the increase of this most pernicious animal, it is high time that the Government should offer for the destruction of each wild dog, a reward sufficiently tempting to induce native poachers to turn their natural ingenuity into a legitimate and useful channel. The giving of rewards for killing tigers, panthers, wolves, etc., might well be discontinued, and a good price set instead upon the head of the wild dog. I have never known a case of man being attacked by these animals, but two instances in which their demeanour towards him has been uncomfortably contemptuous and menacing have come within my knowledge. In one of these a very experienced and intrepid English sportsman, Colonel G., of the Mysore Revenue Survey, who was alone, and with no other cartridges besides the two in his gun, and in the other a horse-keeper of my own, who, with another native, was conducting my pony along a path through the forest, were respectively much

relieved when the episodes terminated without an attack on the part of the dogs. I believe that a pack of wild dogs is quite capable of dispossessing a tiger of his kill by forcing the big beast to retire; and I know a case in which wild dogs came to feed upon a cart bullock, which had been killed by a tiger for whose return Mr. (now Colonel) N. C. was watching, when the freebooters came on the scene.

THE INDIAN WOLF (*Canis pallipes*)

This animal is found throughout India, but does not occur on the Himalayas. In colour it varies a good deal, the different tints being dependent upon climate and season, as well as upon age. Some are of a reddish hue, others grizzled, a few dark brown, while very old specimens are quite grey. The Indian wolf stands 26 inches in height at the shoulder, and though he is a bloodthirsty and ferocious animal, is also an arrant coward. In spite of the fact that wolves are plentiful in the Mysore district, of the forests of which I was for seven years in charge, I never heard of a case of their attacking human beings, or even of their carrying off native children; though elsewhere—and particularly in the Central Provinces—many of the latter are said to fall victims to the rapacity of these animals. I frequently saw wolves, sometimes singly or in pairs, and I have also seen as many as six or eight together, on ground frequented by the Indian antelope. They have been observed,

as related by Captain Baldwin, to hunt their prey in accordance with an obviously preconcerted plan, some members of the pack posting themselves at intervals behind cover, while the remainder went round to drive the antelope—or gazelles, as the case might be — towards their ambushed confederates. Sheep, of course, form a favourite and easy prey of this animal, which is also partial to dogs, foxes and hares. Although it is generally stated that foxhounds cannot run down a wolf, I have known two instances in which the pack formerly kept by the late Maharajah of Mysore successfully performed this feat. In each of these cases it is probable that the animal was gorged.

THE PARIAH DOG

The numbers of half-starved, often cruelly-mutilated, and frequently ownerless dogs which frequent the purlieus of every Indian village, and which live mainly upon garbage, offal and carrion, are very destructive poachers in the case of new-born fawns, young leverets, and the young of game birds before the latter have attained powers of flight. Nothing that these brutes can circumvent and seize is overlooked by them, and they are always hungry, and ever ready to frighten and to drive away any game the capture of which is an impossibility for them. In their keenness to do as much damage as possible to helpless young animals and birds, the efforts of these pernicious

brutes are emulated by the jackal, who, though he lives chiefly upon carrion, will neglect nothing edible, living or dead, which he may come across.

MINOR POACHERS

Of the enemies of Indian feathered game—after the native poachers who have been already mentioned—several species of wild cat and of mongoose are the chief delinquents amongst the small mammalia; whilst kites and crows (both of which are in their legions), and in a less degree, eagles and many species of falcons, hawks, and owls account for vast quantities of the young of game birds, as well as (in the case of some of the feathered poachers) of the mature birds themselves. Snakes and rats, moreover, as well as the mongoose, take toll of the eggs of the unfortunate birds; and it is wonderful how, in the absence of all protection, feathered game is able to exist at all in spite of so many voracious and ever-vigilant foes, in the case of so many of whom nature appears to have omitted to place any adequate limit upon reproduction and multiplication.

NUISANCES IN INDIAN SHOOTING

In addition to the list of poachers, all of whom in a greater or less degree are of course nuisances to the sportsman, there are two or three nuisances which are entitled to special mention.

One of these is the "did-he-do-it" plover, so

called from its startling strident note when disturbed. This troublesome bird is very partial (for nesting purposes) to little open spaces in the jungle, and the sportsman who may, while moving stealthily, with rifle on full cock, through a likely part of the forest in search of deer, have had the misfortune to start one or a pair of these birds, knows well that every animal within hearing of that eerie cry has as surely taken the alarm as if it had itself seen the human intruder. Another unmitigated nuisance to the sportsman in Thibet is the kyang or wild ass, whose irritating curiosity leads it to gallop round a stalker as soon as it has perceived his presence, and by its absurd antics to communicate the alarm to the game which he is endeavouring to approach.

Monkeys, too, are often to blame by chattering when they see a sportsman, and thus drawing the attention of all other animals within hearing to the fact that an enemy is on foot; but as they often do the sportsman a service by indicating in the same manner the whereabouts of a tiger or a panther, it is comparatively easy to forgive them for an occasional indiscretion.

CHAPTER XXI.

SOME SMALL INDIAN ANIMALS WORTH SHOOTING

SO extremely numerous are small animals in India which fall within this category, that I shall attempt to deal with only such of them as I have personally shot, or seen. Sterndale mentions no less than thirty-six different species of squirrels, and the skins of many of these are well worth preserving; but very few of these are found in the forests of which I have had most experience, so that my list will be but a very short one.

THE BLACK MONKEY OR NEILGHERRY LUNGOOR
(*Semnopithecus vel Presbytes jubatus*)

This beautiful monkey is found upon hill ranges in the South of India. I have personally seen it upon the Neilgherry and the Travancore hills.

It is covered all over with long hair, which is deep black in colour, except on the head and nape of the neck, where it is reddish brown. Sterndale states that the length of the head and body is 26, and that of the tail 30 inches.

This animal utters a weird, unearthly cry, which can be heard a long distance off. It is very wary,

and therefore somewhat difficult to shoot. The skins form splendid rugs, and strips cut from them make a most effective edging for a tiger's skin.

THE BENGAL LUNGOOR (*Presbytes entellus*)

This large monkey is common in the forests of Mysore, where I have often shot it. Jerdon gives the length of a male specimen as 30 inches to the root of the tail, the latter being 43 inches, but states that it exceeds these measurements.

In Mysore, where it is termed Musya, some old males have very beautiful silver-grey skins, the hair being fine and long, while in females and younger animals there is much admixture of slaty and dirty brown hues, the hair of such being shorter, and their skins not worth preserving. The hands, feet, and face are deep black. I did not like shooting these animals on account of the rarity of a really beautiful skin, but the Kurrabas eat them, and often begged me to shoot one for them.

Like the preceding species, this monkey utters an uncanny, loud, and long-protracted cry, which may frequently be heard resounding through the timber forests of Mysore. It is in that country a very timid animal, inhabiting only the large forests at a distance from villages. It is gregarious, and often a considerable number may be found together. Its agility is wonderful, and it can jump from the branch of one tree to that of another with unerring accuracy. If this should, on account of

the distance between, be impracticable, it will descend the trunk and run along the ground to the next suitable tree. I but once succeeded in capturing a young one, which gave me and my men much trouble ere we secured it. The Kurrabas sometimes kill these animals by driving some of them into an isolated tree, and then felling the latter.

THE MALABAR SQUIRREL (*Sciurus indicus vel Malabaricus*)

I have often shot this large and beautiful squirrel in Mysore. In colour it is chiefly of a dark maroon-red above, and orange-yellow below, the tail being black with a yellow tip. The head and body are about 20, and the tail 15 inches respectively in length. It is found in heavy forest, and is said to make excellent soup, though I have not personally tested this, as I acknowledge a dislike for gastronomical experiments.

It appears to pair, since two are often found together. Skins of this species are well worth obtaining and preserving, but the animals are of course frequently met with when the sportsman is in search of large game, and when he is neither provided with a suitable weapon, nor, if he had one with him, would dare to use it, for fear of spoiling his chances of finding the larger animals. A charge of number 5 shot is quite sufficient to bring it down.

THE BLACK HILL SQUIRREL (*Sciurus giganteus*)

This large species measures, according to Sterndale, head and body about 15, and tail about 16 inches. It is not found in Southern India, but I remember shooting a specimen of it in Assam many years ago.

The following is a small part of Anderson's description of it, the whole of which is quoted by Sterndale :—" This species has well-tufted ears; the upper surface is either wholly black or reddish brown without any trace of white; the tail is generally jet black, also the outside of the fore and hind limbs, and the upper surface of the feet; an elongated black spot is almost invariably found below the eye from beyond the moustache, and the eye is encircled with black."

THE BROWN FLYING SQUIRREL (*Pteromys oral*)

This curious creature inhabits the large forests of India. Being nocturnal in its habits, it is seldom seen by the sportsman, though not infrequently captured and killed by wood-cutters, from whom skins might, on promise of payment, be obtained. In colour it is dark grey. One which was brought alive to me was about the size of a small domestic cat. Sterndale states that the head and body measure 20, the tail 21, and the breadth across the extended parachute-skin 21 to 24 inches.

I once saw a flying squirrel in the day-time, in the act of making quite a long flight, in a glade in one of the Mysore forests.

THE INDIAN FOX (*Vulpes Bengalensis*)

This pretty little animal is very common in Mysore, where it frequents the open plains which are also the home of the antelope. I used constantly to see it when out shooting black buck, but have never specially sought for it. In colour it is mainly grey and reddish grey. Its size, according to Sterndale, is:—"Head and body 20 to 21 inches; tail 12 to 14 inches; weight 5½ lbs."

Except for coursing with greyhounds, this animal affords no sport. I have often been tempted into firing ineffectual running shots at it with a ·500 express rifle, when there was no danger of alarming the game of which I was in search.

THE WILD CATS OF INDIA

Of these there appear to be about eight species found in various parts of the empire. They are not very often seen, and still less frequently shot, since if one of them should come forward in a beat for the larger felines, it would not be fired at so long as any hope remained of the appearance of one of the former.

I shot a beautiful cat upon one occasion, but am unable to identify the species to which it belonged. I did not keep the skin, which had

been terribly damaged by the ·500 express bullet with which I shot it.

A forest officer in Malabar, in whose house I once spent several days, possessed at the time a tame specimen of the very handsome leopard cat—so at least my friend, who was a sportsman, and to some extent a naturalist, termed it. Sterndale says that the leopard cat (*Felis Bengalensis*) is untameable, and he quotes Jerdon, Blyth, and Hutton in support of this dictum. The cat I refer to agreed in colouring with the description of that species given by Sterndale, but it was quite tame, wandered about the house and grounds at will, sometimes absented itself for several days, but always returned. One peculiar, and rather disgusting, habit of this animal was always to select a wash-hand basin of water, for the purpose of defecating.

THE BLACK-NAPED HARE (*Lepus nigricollis*)

This hare, which in size and colour approaches more nearly to the blue, or arctic, species in its summer coat than to the familiar English brown hare (albeit lighter and yellower in colour than the former), is common in Mysore, where I occasionally shot it in large forests, in scrub jungles, on the plains, and when snipe-shooting in dry grass adjacent to the wet land.

Hares, as food, afford a pleasant variety in a country which does not offer a great diversity of viands, and are therefore worth shooting. They

are easiest obtained in scrub jungles by the employment of beaters.

THE COMMON FLYING FOX (*Pteropus Edwardsii vel medius*)

This large bat is very common in India generally; and in Mysore vast colonies of them are to be seen hanging by day, with wings closed, on some large tree, and at dusk flying overhead on their way to search for the fruits on which they feed. In colour they are rusty black, with the neck and shoulders yellow.

Sterndale's measurements are:—"Length 12 to 14 inches; extent of wings 46 to 52 inches." A few specimens of this species may be procured for the purpose of preservation as curiosities.

CHAPTER XXII.

INDIAN SNIPE SHOOTING

ALTHOUGH the continent of India, with its marvellous range of elevation and diversity of climate, is the home of an enormous number of species of game birds and wild-fowl, there is no bird amongst them all which is at once so widely distributed, so generally popular amongst sportsmen, and so welcome an addition to the somewhat circumscribed Indian menu, as the ubiquitous snipe. From his peculiar cry when he rises, the Mahomedans term this bird the "Cha-ha," in fancied imitation of the former.

Not only is the snipe found during about half the year nearly everywhere in suitable localities all over our vast Indian empire, but he also generally occurs in sufficient numbers to make it worth the sportsman's while to encounter the burning rays of the tropical sun, and the fatigue resulting from severe toil thereunder. Indian snipe shooting is often a very laborious exercise, owing to the depth of the yielding mud through which the sportsman must plod.

The snipe is a sporting bird when flushed, and his swift, uncertain flight, and diminutive size unite

to render a combination of rapidity in the use of the gun, with straight shooting on the part of the sportsman essential for the achievement of success in his pursuit.

Most people seem to think that the Indian bird is slower and less gyratic in his flight than his *confrère* in the United Kingdom; but, although this is doubtless true under certain conditions, considering the frequently arduous nature of the walking, the terrible heat of the Indian sun (and the combined effect of these upon the sportsman), and contrasting such with the comparatively pleasant and easy conditions under which snipe are shot at home, I deem the Indian shooting by far the more difficult of the two. Throughout a long day, in which a large bag of snipe is made in India, I am strongly of opinion that a sportsman *who shoots for a bag, and not for an average*, does really well if he has one bird to show for every two and a half cartridges expended. Lost birds, wounded birds which rise again, and long shots, all help to swell the total of ammunition expended; and in my experience, very few men indeed who try to bag everything within possible (which of course includes some shots at almost impossible) distances, can average more than one bird brought home for every three cartridges used during the day. At home, on the other hand, I should consider such an average at snipe as *very poor indeed*. Personally, I find that I can make a far better average at a small number of snipe at home than I ever could in India over bags of from

twenty to sixty couple per diem. It is quite true that, in the heat of the day, snipe in India often sit close and fly lazily, but I have also seen them every bit as wild as their wildest congeners at home, even when the latter are met with on a wet marsh, on a wild day, and when the birds are sufficiently numerous to warn one another by their cries as they get up.

I have upon two occasions in India seen about two hundred birds in the air at the same time; and when shooting there, as I have sometimes done, in rain, I have found the Indian snipe well-nigh unapproachable within possible range, while his speed and eccentricity of flight in no way fell short of those displayed under similar conditions by the English bird.

Three common species of snipe are widely distributed throughout India, viz., the Fan-tail, or common snipe, which appears to be identical with the British bird; the Pin-tail, which so closely resembles the former that a tyro would not observe any diversity between the species; and the Jack, which appears to be the same bird as is known by that name in the United Kingdom. A species, wrongly named the painted snipe since it is not a snipe at all, is frequently met with and bagged when snipe shooting, and is counted in the bag. A brief description of these four birds may advantageously be inserted in this place.

I. THE FAN-TAIL, OR COMMON SNIPE

(*Gallinago cœlestis*)

This bird is widely distributed all over the greater part of the empire in suitable localities. It is impossible, where both species are often found frequenting the same area in almost equal proportions, to lay down any hard and fast rule; but it may be safely said, speaking generally, that he is found in somewhat more humid spots (even upon the same stretch of wet land) than is the pin-tail. He is considered to be wilder, and to possess a sharper and more erratic habit of flight, and is moreover just a trifle larger than the latter, with a rather longer bill which is slightly more flattened at the tip than is that of the other species.

The principal food of this snipe consists of earth-worms, with small molluscs and other water-insects, etc.

The common snipe breeds in the Himalayas and Thibet, and migrates to India proper each autumn, remaining there until spring (and in some cases as late as the month of May) of the following year.

The average weight of both sexes calculated by Mr. Hume (Hume and Marshall's *Game Birds of India*) after numerous weighments of individuals, works out as $4\frac{1}{8}$ oz. per bird, the largest recorded by him being a female which weighed $5\frac{1}{2}$ oz.

The most striking point of difference between this species and the pin-tail lies in the number and form of the tail feathers. Hume states that the

feathers which compose the tail of the common snipe are fourteen in number, occasionally sixteen, and very rarely only twelve. These are broad, and are similar to those found in the caudal appendage of the English bird. The pin-tail, on the other hand, has but ten broad tail feathers, on either side of which are from five to nine very narrow, pointed, stiff ones from which the bird derives his name.

In some localities the first species predominates, and in others the second; while in many places both occur in almost equal proportions. I have only occasionally taken the trouble to examine the tails of a bag of snipe (the pin feathers in the pin-tail lie underneath, and are concealed by the broad ones), and I have kept no record of the relative proportions found in different districts.

The common snipe practically has it all its own way in the North-West Provinces and part of Oudh, the other species not favouring those localities.

II. THE PIN-TAIL SNIPE (*Gallinago Sthenura*)

Although in the North-West and parts of Oudh this bird is very rare, in some localities he appears in far greater numbers than does the preceding species. Like the common snipe, this bird is migratory, and arrives in India a little before the former.

His menu comprises the food of the common snipe, and in addition insects, such as grubs and

caterpillars inhabiting drier ground than those composing the ordinary diet of the other bird.

The females of this species are large and possess longer bills than do males *of the same age.* Hume, after compiling the results of the examination of nearly one hundred specimens, thus states the range of variation: males, 3⅓ oz. to 4¾ oz.; females, 3¾ oz. to 5½ oz. Average of both sexes, 4 oz.

III. THE JACK SNIPE (*Gallinago gallinula*)

This bird too is migratory, and, although found all over most parts of India where wet land occurs, is rare in many places largely resorted to by the two preceding species. He is further more fastidious in his choice of localities, and in some seasons, in the same spots, is far more common than in others. I have often found jacks in places which were too wet for the other birds, but I do not remember having ever shot more than three or four couple in a day amongst a large bag of snipe.

Jacks, as a rule, lie very close, and rise and go off with a comparatively slow but erratic flight, and they are perhaps more often missed than are their larger cousins. When fired at and missed, they can usually be marked down—often not far off—and, once flushed, generally come into the bag.

This tiny bird, which is considered by epicures to surpass the other species in delicacy of flavour, weighs only from 1½ oz. to 2½ oz.

THE PAINTED SNIPE (*Rynchœa Capensis*)

This species, which is wrongly termed a snipe only on account of its inhabiting the same ground, and being somewhat of the same size as, and shape of the common snipe, remains and breeds in India. It is a very beautiful bird of truly tropical richness of hue. The female is larger than the male, and far more brilliantly plumed, the lovely dark green hue of the back and wing coverts being strikingly relieved by the rich chestnut-coloured spots in the wing feathers. In flight this bird is slow, and, flapping along like an owl, is often missed when it rises before a man who has been making good practice at the far more rapidly flying species. I have shot it in Assam and Sylhet, in Mysore, near Madras, and in the Madura district, but I have never found it common anywhere, though a large bag of snipe of all sorts has usually contained from one or two, up to half a dozen "painters."

Hume gives the weight limits of this species as—males, $3\frac{1}{2}$ to nearly 5 oz.; females, $4\frac{2}{5}$ to nearly 6 oz.

The painted snipe is found over most of India except the Himalayas, but it is rare in many parts.

The breeding season is August and September. It is, in my opinion, a very good bird when cooked, though it has been disparaged in this respect by others.

The only other species of snipe which deserve mention are the *Wood*—and *Solitary* snipes, and they are too rare to merit any special notice.

SNIPE SHOOTING

Snipe occur in more or less abundance, according to local conditions, both in natural swamps, and in the enormous areas of artificially irrigated land devoted to the cultivation of rice and other crops requiring moisture.

For the purpose of irrigation, chains of tanks (or artificial reservoirs) some distance from each other, and with a fall from the top one to the next, and so on, supply water to the wet land (which is usually cultivated with rice) lying below each of them, the surplus fluid being conducted into the tank next below.

Any portion of the irrigated land, as well as of the waterspread of the tank, may, when it is in condition for them, and at the proper season, be expected to hold snipe if the locality is a favourite one with the birds. Snipe have preferences and dislikes for localities which only one of themselves could explain, and though doubtless food-supply is their main factor, the birds usually shun places in which the mud is mixed with gravel, or is gritty.

Too much water is a very common cause for disappointment, when the sportsman has perhaps ridden or driven some miles to a favourite ground, only to find the greater part of it submerged, and therefore untenanted by the birds.

Deep, soft mud, if covered with a growth of short grass, is very suitable for the requirements of snipe, and such is often to be found both in

the waterspreads of the tanks, as well as in any rice fields which may be lying fallow for the season. Very often, while the rice (or paddy) is still short—more particularly if it has partially failed and is thin—numbers of snipe may be found in the crop itself. They need not, however, be looked for in high, thick paddy, though even when the crop is approaching maturity, I have found a fair number of birds upon the divisions (or bunds) between the little fields, where it would not, however, be ordinarily worth while to seek them.

In one portion of the Mysore province, a goodly number of the inhabitants are engaged in the growth of silk, and it was in mulberry fields below a tank, that I one day found the bulk of the birds which yielded a bag of sixty-one and a half couple to my own gun. This was at Chinnapatna, on the line of rail between Bangalore and Mysore.

At Yedatore, about twenty-two miles from the town of Mysore, a friend and I once made a bag of sixty-nine and a half couple in a day, fifty couple of which fell to my own gun. The shooting upon this occasion was obtained mainly in the water-spread of a tank and in fallow rice fields.

My largest bag of snipe in one day single-handed was sixty-three couple, and was made a few miles from Madura (in the Madras presidency), where I enjoyed the best snipe shooting which I have ever had. On the last eight occasions upon which I went out for this game from the town of Madura, I averaged almost exactly thirty couple per diem

to my own gun. There was no single bag of much over forty couple, and one of the eight totals contributing to form the above-stated average, consisted of only *two couple and a half!* The reason for this last was that I had, upon a ground at some distance, seen a large number of birds some time before, and wishing to ascertain whether they were still on that ground, I sent a native to inspect and report. On his returning with the news that birds were still there, I made sure that I should make a large bag. Imagine my disgust, on arriving at the place, to find it quite dried up, and the birds all gone! The rascal whom I had sent had evidently saved himself the trouble of going, and had trusted to luck (and to lying) to see him through. He had certainly quite spoilt my day, but as he accompanied me, and as I was very far the reverse of amiable towards him, I am sure that he did not greatly enjoy his own!

Before going out shooting, a native shikarrie—a reliable man, if possible—should be sent to scour the country, to visit different places, and to ascertain which of the latter will best reward the sportsman's energies. It may be that two or more distinct grounds lie at no great distance apart, and may thus be shot over, if not too extensive, on the same day.

The earliest date on which I have seen snipe in any appreciable number in Mysore, was on or about the 20th September, in one year only. This is extraordinarily early for the arrival of the birds in that province, though upon that occasion I

bagged about thirteen couple. It was, however, seldom much worth while to look for snipe in that country till the 15th or 20th of October, and I made my heaviest bags there much later in the season. In Madura, I have seen a good many birds towards the end of September, but I seldom looked for them so early, the heat then being very severe. In snipe shooting, it is a great advantage if the sportsman can be accompanied by at least one or two natives who have been out shooting with him before, and who know how he wishes the men with him to act. The best plan is for him to place two or three men, a few paces apart, in line on each side, himself taking the centre, the distance between each man in the line of course depending upon the nature of the cover, and upon whether the birds are lying very close, or rising freely, and often requiring variation in different portions of the same stretch of ground. The object is, of course, to put up all the birds on either side of himself which can be comfortably commanded by the sportsman's gun, without springing those which would be out of shot before he could fire at them, as would be done were the line employed to be too long. In working a wide stretch of ground, the line must be wheeled at the end, and as many beats across and across taken as may be necessary to cover the whole—just as in walking up partridges in turnips in England. The men should be warned to carefully mark all fallen birds, but on no account to leave the line to pick up one of them unless specially ordered so to do.

It frequently happens, when the men employed are new to the work, that some excited dunderhead, rushing forward to pick up a bird which has been shot, puts up a number of others out of range, most of which would have afforded chances had the line advanced without any such exhibition of undesirable zeal. If a bird should fall in front and in the beat over which the line is about to pass, it should be picked up during the advance; but should it have dropped in a portion already beaten, the line should halt while one or more men are sent to retrieve it. If, on the other hand, a shot bird should be lying in fresh ground which will not immediately be traversed by the line, it is better, if there is the least doubt as to subsequent easy recognition of the place, to call a halt, while the sportsman goes with one or two men straight to the spot, so that, should other birds rise, they too may be added to the bag.

When the ground is very wet, and the birds rising very wild on account of their hearing the noise made by the men splashing through the water, it is often necessary for the sportsman to walk in advance along one of the dry bunds, causing the men to walk at some distance behind, also upon bunds. This manœuvre on a wild, wet day, when it is very hard to get within shot of the birds, will often enable a small bag of snipe to be made, most of the birds being shot at longish range, and being to the full as curly and rapid on the wing as are their most wideawake cousins in wet weather at home.

I remember being delighted with one such bag of only some sixteen couple which I made under these conditions, very few of the birds composing it being shot at a less distance than forty yards, and many being stopped considerably further off.

Snipe are generally wild early in the morning, and unless the ground to be worked is very extensive, it is better not to begin shooting too early in the day. By about ten o'clock the sun will be well up and hot, and, in the case of a limited area of ground, that hour is quite early enough for beginning shooting. I have shot snipe from 6 a.m. to 6 p.m., with short halts for refreshment during the day; and where the ground is sufficiently extensive to afford it, should advise others to do the same, provided only that they are physically capable of standing the toil and the sun.

Snipe shooting in Mysore, where the sun is far less trying than it is in the vicinity of Madras and in Madura, and where the climate is so favourable, is far less exhausting than in the latter localities; and yet in the former, I have (once) drunk a full dozen bottles of soda-water during a day's shooting, and I always took out a dozen in case of need. In shooting from the various stations down the South Indian Railway from the city of Madras, and also in Madura, I always took out a box of ice, and cooled my soda-water bottles therein. Without ice, I do not think that I could have endured a long day's toil under the fierce sun of those parts. In Mysore, however,

ice out shooting is not required, the soda-water bottles, if carried in a basket with straw wrapped round each, and the whole kept wet, being rendered quite cool.

A splendid "pick-me-up" after severe toil, is a tin of hare, or some other thick soup, at luncheon time. This is easily procurable at a few minutes' notice, if a tin of soup be opened before starting from home, turned into a wide-necked glass bottle, and carried in the tiffin-bag, together with an etna ready-charged with methylated spirit, and a soup plate; and personally I can swallow soup when too much overcome by heat and exertion to care about sandwiches, however well made and appetising under other conditions the latter may be. (I prefer sandwiches of *pâté de foie gras* and sardines to any other.) It has never fallen to my lot to shoot in places where, and at times when, very heavy bags of snipe were procurable; but in many places, granted favourable conditions, bags far in excess of anything possible within my own experience may be obtained, and, only two or three years ago, a single sportsman shooting within reach of Calcutta by rail, and in the same season, made *several* bags of over one hundred couple each. The season was the second of two characterised by abnormal drought, and a huge area of swamp—usually too wet to be practicable—was in good order for snipe, and afforded feeding ground to vast numbers of birds which had been driven to it owing to the drying up of their usual haunts. A bag of over ninety couple has, within my own

knowledge, been made in the Madras Presidency by Captain the Honourable E. B., who was on the staff of the then Governor—Lord Wenlock.

Burmah is a great snipe country, and Colonel W. (late 43rd O.L.I.) once made a notable bag at Tonghoo. He brought home one hundred and sixty-three snipe, and had not expended the whole of the two hundred cartridges which he took out with him. This may seem a "tall order" to sportsmen who do not know Colonel W., but I *know* that it is a fact, and I consider it less extraordinary than some of the same sportsman's public performances with the rifle, both at the running deer target at the National Rifle Association meetings, as well as his score (already mentioned elsewhere) of one point less than the highest possible at Bisley for the "Daily Graphic Cup," the distance being two hundred yards, the bull's-eye an eight-inch circle, and the position *standing!*

The man who is good at standing targets is rarely remarkable at running game, flying game, and with the revolver, yet W. excelled in all branches of shooting.

I have—more particularly in parts of Mysore—seen snipe seek the shade of trees and bushes during the heat of the day, and sometimes the birds did not return to their feeding grounds until dusk.

In India I preferred No. 8 shot for snipe. At one time I used No. 10 in the right barrel, and No. 8 in the left, but I soon gave up the use of the

former, as I found that it sometimes only wounded birds which the larger shot would have brought to bag. Recently, however, in Ireland, a batch of cartridges loaded with No. 9 shot (I had ordered No. 8) gave such highly satisfactory results, in use on snipe, that I intend using this size in future shooting at these birds at home. I use Schultze powder, and am well satisfied with it. A light 12-bore is, in my opinion, the best gun for snipe shooting. The beginner in this sport must not be discouraged by missing, and should try to cultivate a proper style of shooting, regarding misses with as much philosophy as may be possible.

There is no royal road to good shooting, and although some men are quicker in acquiring the art than are others, practice, and the acquisition of a good style will usually enable any man who is blessed with good eyesight to become at least an average snipe shot.

If a man, who has had no previous experience in the use of the shot-gun, wishes to begin upon snipe, he should strive to pitch his gun as quickly as possible, pulling the trigger the instant that the butt touches his shoulder. There must be no attempt to "poke," or aim at the bird. Hand and eye must work together, and with rapidity too, for good work at this game; and they will with practice act harmoniously if a proper style of shooting be adhered to.

Of course, in the case of a crossing shot, the gun must either be pitched at space in front of the bird,

or swung with it (the former for choice), and only practice will teach the tyro how much allowance, dependent of course upon pace and distance, should be made in each case. In snipe shooting, the sportsman should either personally kill each bird which may be picked up alive, or see that one of his men does so directly it has been recovered, for natives are horribly callous as regards the sufferings of animals, and would, if permitted, put the poor birds alive upon the snipe-stick (or game carrier), which is always used in this form of sport.

In order that full justice may be done to this really excellent little bird from a gastronomical point of view, he should be cooked for dinner on the day of his death, be lightly and rapidly roasted before a very quick fire, brought up to table under-done, and gracefully reposing upon a piece of well-buttered toast. Snipe soup, either thick or clear as may be preferred, is truly delicious, and, with the whole of the meat pounded up and incorporated in the case of the thick kind, resembles hare soup in consistency, but is greatly superior in delicacy of flavour to the latter. An allowance of two birds for each person is ample for soup.

CHAPTER XXIII.

BRIEF NOTES ON SOME OF THE GAME BIRDS AND WILD-FOWL OF INDIA

ALTHOUGH the snipe is, *par excellence*, *the* game bird of India, since he affords inexpensive sport to all sorts and conditions of men, in suitable localities, all over the vast continent, from Cashmere in the north, to Cape Comorin in the extreme south, a multitude of other species of game birds and of wild-fowl also inhabit the country. Some of them merit a short description, and a few notes upon their range, habits, and capabilities from a sportsman's point of view, since they offer more or less opportunity for the exercise of their favourite sport to many lovers of small game shooting in different parts of India.

It is impossible, within the limits of a single chapter, to deal otherwise than very generally and briefly with even the more important of these; but in the hope that the novice may find them of service, I will attempt to supply him with some short notes upon the principal game birds and wild-fowl of India. For weights and distribution of these, and for other information also, I am much indebted to Hume and Marshall's *Game-Birds of India*.

THE INDIAN BUSTARD (*Eupodotis Edwardsi*)

This fine bird weighs from 17 to 22 lbs., and is, in my opinion, excellent upon the table. I have bagged bustard in Mysore, where they are not uncommon, both with the rifle and with an 8-bore shot-gun. They are also found in the Bombay Presidency, Kathiawar, the Deccan, Berar, Rajputana, the Punjab, etc. In Mysore, bustard frequent the same ground as the Indian antelope, but exhibit a marked preference for such parts of it as are well clad with short scrub, or bushes. The white neck of the cock is a conspicuous object, even when all the body of the bird is hidden by a bush, and it can be seen, a long way off, overtopping the scrub. The bustard possesses but three toes, and greatly prefers the use of his powerful legs to that of his wings, but when put up and forced to use the latter, he frequently flies for two or three miles before alighting. Bustard are very wary birds, and it is not easy to stalk near enough to one for an ordinary 12-bore gun to suffice to bring him down; but if the direction of their flight when put up on any particular favourite spot be noted, and the sportsman on a subsequent day conceal himself in that line, sending his men round to drive the ground towards him, he may obtain a good shot at a bird passing overhead well within range of that weapon, since the bustard usually flies low.

In Mysore, bustard are generally found solitary

or in pairs, and occasionally in small parties of three or four; I once, however, saw a great gathering of them, numbering, if memory serves me truly, about twenty-seven.

In Canarese the bustard is called *Arlkugina hukki*, *i.e.*, the bird which calls like a man, on account of the noise which he makes, and which is audible at a great distance. By the use of a covered bullock cart, it is usually practicable to approach bustard within easy range for a rifle, and I have shot them thus when antelope shooting with a ·360 express. Bustard are polygamous, the breeding season varying in different parts of India from October to March. The hen apparently lays but one egg.

THE HOUBARA (*Houbara Macqueeni*)

This small bustard, which weighs only from 4 to 5¼ lbs., is migratory, not breeding in India proper. It is found in the Punjab, Rajputana, Northern Guzerat, Cutch, Northern Kathiawar, and Sind. Large bags of houbara are sometimes made from the back of a camel driven in ever-decreasing circles round and round each bird which has been viewed.

THE BENGAL FLORICAN (*Sypheotis Bengalensis*)

This fine game bird is akin to the bustard, possessing, like the latter, only three toes. It is found in Eastern Bengal, Assam, the Bhootan duars, and parts of the North-West Provinces. I have

shot the large florican in Assam, where it frequents expanses of rough, coarse grass (ooloo grass), provided that the latter be not too dense, and that there are plenty of open spaces distributed through it. In Assam, it is known as the "ooloo mohr," *i.e.*, the ooloo-grass peacock.

The florican is much appreciated as a table delicacy, and is on this account always shot when met with. I used, when shooting florican, to put a number of men in line, and walk with them through the grass until a bird rose—usually out of shot of me—when I marked it down (the first flight is generally a short one), and then, walking up quietly and alone, or with only one or two men, to the spot, nearly always approached it within easy distance before it got on the wing. Florican fly slowly and heavily, and there is no possible excuse for missing one of these birds if within range.

Though a large bird, the florican's weight is but 3¼ to 4¼ lbs. according to Hume, though Jerdon makes him heavier by three-quarters of a pound.

THE LESSER FLORICAN OR LEEK (*Sypheotides awuta*)

I have shot this little florican, which weighs only from 1 lb. 2 oz. to 1 lb. 10 oz., in Mysore when out snipe shooting. It is uncertain in its appearances in different localities, being plentiful in some seasons and very rare in others. The Tumkur district of the Mysore province contains good lesser florican ground. The Bengal florican is not found in the

south of India, and the lesser species is very rare in the north. It is fond of dry grass, and is best found and flushed by a line of men.

SAND GROUSE

Various species of sand grouse, some of them local and rare, are found in India. I have personally shot representatives of only two—both in Mysore—viz., the common (*Pterocles exustus*) and the painted (*Pterocles fasciatus*). Of these, the former is found throughout India in suitable localities, while the latter, though widely distributed, is somewhat local.

The common sand grouse prefers open plains with a sparse growth of scrub and bushes, and the painted, stony forest tracts, and the bases of low, rocky, bush-clad hills. The name "grouse" is quite undeserved by the various species, which resemble the pigeon more than they approximate any other bird. Sand grouse always go to drink at from 8 to 10 a.m. and from 4 to 6 p.m. (according in each case to the season), and if the sportsman should station himself near the water to which they resort, he may bag a number of them either morning or evening.

THE GREY PARTRIDGE (*Ortygornis pondicerianus*)

This bird is found in most parts of India. I have frequently shot, but have seldom specially sought it. It is too partial to scrub jungle to afford

good sport, and is not worth cooking when bagged. I always avoided eating these birds on account of their uncleanly habits in the matter of their food.

THE BLACK PARTRIDGE (*Francolinus vulgaris*)

This bird belongs to the north, and to Bengal, and is not found in the south of India. I have met with and have shot it in Assam. In parts of Bengal, black partridges afford very pretty shooting when beaten out of high reed jungle.

THE CHUKOR (*Caccabis Chukor*)

This fine species is found throughout the Himalayas, including Thibet, and also in the salt range of the Punjab. In different localities, it is found at all elevations from sea-level to at least 16,000 feet.

It is fond of well-wooded hills, provided that cultivation and plenty of water be in the vicinity. It is also found in deserts, and on barren, rocky ranges.

The best month for shooting chukor on the lower hills is October, when the young birds are strong and in good condition. They are found in coveys of from ten to fifteen, or even more, birds. On being flushed, they fly down hill, scatter, and at once begin to call, and if followed up, a number of them may generally be bagged. The chukor exhibits considerable difference in size,

and Hume states the extreme range of variation as from 19 to 27 oz. in the case of males, and from 13 to 19 in that of the females.

THE COMMON PEA-FOWL (*Pavo Cristatus*)

This familiar bird is found inhabiting the forested area near cultivation, in suitable localities, all over India. It prefers to combine cover, water, cultivation and quiet. I have bagged pea-fowl in Mysore with both rifle and shot-gun, and consider a young bird as a welcome addition to the larder. A second species, which differs from the common one, occurs in Burmah.

THE KALEEGE PHEASANT (*Euplocamus*)

There are four well-marked species of kaleege, all of which inhabit the north of India. I have shot the black-breasted species (*Euplocamus Horsfieldi*) in Assam, where it is called the "derrick." It is a good bird for the table, but does not usually afford much sport, except where isolated patches of jungle are separated by cultivation from the large continuous forest, in which case any birds in the former can be beaten out just as pheasants are at home. In the large forest itself, the only way to shoot derricks is to use a dog to put them up, whereupon they rise and perch in trees, and may then be shot sitting. So dense and tangled is the Assam jungle, that were the

sportsman to make the bird fly from the tree, he would be unable to obtain a shot.

The brilliant, glossy black of the cock bird is a strikingly handsome plumage; but the hen is, like the female of most of the pheasants, a homely brown bird. The natives, taking advantage of the pugnacity of the cocks, capture numbers by using a male bird as a decoy, with running nooses set in proper positions all round him. The derrick is found in the Coosya and Garo hills up to an elevation of 4,000 feet.

THE GREY PEACOCK PHEASANT
(*Polyplectron Thibetanum*)

This beautiful but rather rare bird is found in the hills above the valley of Assam, and in Hill Tipperah, Chittagong, Arakan, etc.

THE MOONAL PHEASANT (*Lophophorus impeyanus*)

This magnificent bird is found throughout the Himalayas in suitable localities. The cock is a gorgeous exposition of metallic colours of diverse and striking hues, and weighs up to 5¼ lbs. in the case of a large specimen. The hen, whose plumage is brown, is rather smaller than her consort.

The moonal requires forest as well as high elevation. For shooting this bird, the spring is the best season. The sportsman, sending his men to walk in line on the hillside above him, must

shoot the pheasants as they are darting downhill at a very high rate of speed. Moonal breed in May and June.

THE INDIAN CRIMSON TRAGOPAN (*Cerioruis Satyra*)

This is another pheasant whose male is gorgeously attired, and which inhabits parts of the Himalayas, of Gurwahl, Sikkim, Nepaul, and Bhootan. Like the moonal, it affects wooded ranges at high elevations. Unless it be called up to the sportsman by his shikarrie, dogs are required to put up this bird. Cocks weigh from 3½ lbs. to 4 lbs. 10 oz., hens being considerably lighter.

THE KOKLASS PHEASANT (*Pucrasia Macrolopha*)

This Himalayan pheasant is, according to Hume, the best of the Indian species, both for sport and for eating. The middle of November is the most favourable season for shooting the koklass, whose favourite habitat is wooded valleys at an elevation of from 7,000 to 8,000 feet. It is not found much lower than 4,000, and occurs as high as 14,000 feet. Well-trained spaniels are useful in this shooting, and trained men to mark the birds are required for success in the sport.

The breeding season is the spring and early summer. The cock weighs from a little over 2 up to nearly 3 lbs.

THE RED JUNGLE FOWL (*Gallus ferrugineus*)

This bird is very like, but rather larger than, a red game bantam. It is common in the valley of Assam where I frequently shot it, and also on the Cossya, Naga, and Garo hills, Cachar, Sylhet, Eastern Bengal, the Sunderbunds, Aracan, etc., and is found also in the eastern portions of the Central Provinces. Its southern range terminates at the Godavery river, but it occurs in Ganjam, Vizagapatam, and part of the Godavery district.

It may be looked for at sea-level, and also at all elevations up to 3,000, and even, in summer, 5,000 feet. Where it can be successfully beaten out, as for instance when it is found in detached hills or in covers of manageable size, this jungle fowl affords very sporting shots. It is fond of cultivation at the very edge of the forest. Its breeding season varies with locality from January to July. The cocks weigh from $1\frac{3}{4}$ lbs. to $2\frac{1}{4}$ lbs.

THE GREY JUNGLE FOWL (*Gallus Sonnerati*)

This beautiful bird is the jungle fowl of Southern India. It extends to part of the Central Provinces, but is not found north of the Godavery river. It is fond of hill tracts, and is also abundant on the Mysore plateau in the forests of which I used often to shoot it. It is, on the hill ranges of the Nilgiris, Western Ghauts, Anamalais, etc., found at considerable elevations, and its range extends

from sea-level to about 6,000 feet. Jungle fowl may be beaten out of ravines, small covers, etc., and may also be met with on any roads which are made through forest tracts. It is the cock of this species which supplies us with the beautiful hackles which enter into the composition of so many salmon flies. The grey is a trifle larger than the red jungle fowl.

THE COMMON OR GREY QUAIL (*Coturnix Communis*)

This bird is migratory, and arrives in India from Central Asia, Persia, Arabia, Africa, etc., in the autumn. The numbers which come over in each migration vary considerably, as also do the localities in which the birds are most plentiful, in different years. If food be scarce in the north, many of them push on towards the south.

Frequently enormous numbers of quail are found in March in Northern India, the birds having been attracted there from the south and east by the ripening of the crops. They are usually shot in standing crops, and Hume mentions a device employed in quail shooting in the north whereby the birds are put up with the minimum of damage. A thin cord, forty or fifty yards in length, is furnished at each yard with a white feather. Two men, one at each end, drag this cord over the field, the sportsman walking just behind its centre. As many as one hundred couple have been bagged in a day by one gun. Quail fly swiftly, but straight, and thus afford very easy shooting.

In Mysore, the black-breasted or "rain quail" is more abundant than the common species, and, unlike the latter, it breeds in India, the eggs being laid in August and September.

Other common Indian quails are the various species known as bush, bustard, and button quails —all very small but beautiful birds, the last-named not exceeding about an ounce and a half in weight.

As a table bird, I personally do not think much of the quail, but many people like him, and a good deal depends upon how he is cooked.

Hume, who suffered from gun headache after firing a number of cartridges filled with ordinary loads, employed, for bush-quail shooting, cartridges thus loaded—

One drachm of powder, then a thin wad with sawdust above it to partly fill the case; then another thin card wad followed by half an ounce of No. 10, or of dust-shot, and a cardboard wad above the shot.

THE WOODCOCK (*Scolopax rusticola*)

The woodcock occurs on the Himalayas and other hill ranges in the north, being found thereon at even above 10,000 feet elevation, as well as in tracts at the foot of those hills, and on the Nilgiris, Shevaroys, Anamalais, and other hill ranges in the south. I have, in India, personally shot it only upon the Cossya hills. Woodcock shooting is one of the recognised forms of sport upon the Nilgiris, and though the bags obtained are but

light, it claims many ardent devotees. I have heard a story of an old colonel, who, on being informed by his companion that the latter had seen a fine sambur stag, exclaimed, "Damn the stag! Where's that woodcock?" In woodcock shooting, a number of coolies must be employed to beat the sholahs—unless, indeed, the sportsman should possess a team of well-trained spaniels.

The Indian bird is of smaller average size than the English woodcock, and weighs only from 7 to 12½ oz.

WILD GEESE

The *grey lag goose* (*Anser cinereus*), a large bird averaging 7, but sometimes reaching 9 lbs. in weight; and the *barred-headed goose* (*Anser indicus*), a smaller bird than the former, and weighing only from 4 to nearly 7 lbs., are both cold-weather visitors to India.

Just as their congeners elsewhere, wild geese in India are adepts in the noble art of self-preservation, and are difficult of access. I have never shot the grey lag, and but once a specimen of the smaller species. Hume recommends the use of a boat, in which the sportsman must lie flat, pushed from behind by a man who keeps himself well concealed; and he also mentions another plan, viz.—the sportsman lying in ambush on their feeding grounds after dusk, and waiting for the arrival of the birds—as one which is frequently very successful.

Even such naturally wary and suspicious birds as wild geese become wonderfully tolerant of the

presence of man if systematically protected from all interference. I well remember how tame were the barred-headed geese which frequented the tank which occupies the centre of the Civil Station of Sibsaugor, in Assam. A public road ran all round the tank, and along the former were the Europeans' houses and the official buildings. The geese were perfectly at home, were never molested while on the tank, and would approach its edge quite fearlessly, regardless of passers-by. But this tameness lasted only so long as the birds were in their sanctuary, viz., the said tank. When met with elsewhere on their feeding grounds, they were as hard to approach as are any other wild geese.

WILD DUCKS AND TEAL

Out of the many species of wild ducks and teal which are found in India, a few only merit special notice.

The mallard (Anas boscas) is almost entirely restricted to the far north, and is but very occasionally found elsewhere.

The ruddy sheldrake, or Brahminy duck (*Casarea rutila*) is a very handsome bird, but is not at all good upon the table. I have shot this species in Assam and Sylhet, where it was common, but I have never seen it, as far as I remember, in Southern India.

The grey or spotted-bill duck (Anas pœciloryncha) is a splendid bird, which even Lucullus would have welcomed as an addition to his bill of fare. Most

unfortunately, this duck (which lives and breeds in India) is addicted to the culpable habit of selecting the snipe-shooting season for laying its eggs preparatory to rearing its second brood. It is in size very similar to the mallard, if not slightly heavier, a large drake sometimes attaining a weight of $3\frac{1}{4}$ lbs. I often shot this duck in the Mysore country, etc.

The shoveller (Spatula clypeata) is found nearly all over India.

The pin-tail duck (Dafila acuta) is a large and handsome bird. A drake of this species sometimes weighs as much as three pounds. It is common in Mysore.

The common teal (Querquedula crecca) is found in most parts of India, and is migratory, arriving in the autumn and leaving in the spring. Although I have shot this bird both in Assam and also in Mysore, I have not found it anywhere as plentiful as is the garganey teal in the latter province.

The garganey or blue-winged teal (Querquedula circia) is a migratory species which is widely distributed. It visits the Mysore country, and the south of India generally, in large flocks, and, like the common teal, than which it is just a shade larger, is an excellent bird to eat.

The whistling teal (Dendrocygna Javanica) is common in most parts of India. It is fond of trees, as its scientific name implies. It is not worth eating.

The cotton teal (Nettopus coromandelinus) is found nearly all over India. It is in reality a very tiny goose, and, curiously enough, it perches

and roosts in trees—frequently nesting in holes in the latter. It is much smaller than the common teal, and is, in my opinion, a good bird on the table. Many other species of ducks, teal, and pochards are found in the empire, and a big bag of web-footed fowl often contains a great variety.

DUCK AND TEAL SHOOTING

Except in a desultory way, I did not go in much for duck shooting, the (to me) far superior attractions of the curly-flighted long-bill inclining me to devote my spare time in the cold weather to the latter rather than to the former. I shot duck and teal when I came across them, and even on occasion have gone out specially to shoot these birds, but have thus exclusively devoted comparatively little time to the web-footed fowl.

Where duck and teal are found frequenting a large tank fringed with high reeds, if several guns go out together, taking up positions amongst the latter at a considerable distance apart, while a native, going on the tank in a boat, keeps the birds on the move, a large bag may often be made. A collapsible Berthon or other folding boat is a very useful adjunct in duck shooting.

Personally I prefer No. 5 shot for duck, though many sportsmen use a larger size. It is advisable to have as many pellets as is consistent with sufficient penetration in the charge, on account of the greater chance of striking a vital spot, and everyone who has shot duck knows what a number

of winged birds are lost. No. 5 shot will kill at a considerable distance, and a charge of it contains, of course, more pellets than does the same weight of larger shot. If a strong wind should be blowing across the large tank, the lee shore should be searched after all the shooting is over, and as late as possible before leaving the ground, as duck often carry on after being mortally wounded, die in the water, and are drifted by the wind to the shore.

I will give a brief account of my best day at this class of sport. I was alone in camp at Hunsur, and, being lame from a temporary injury to one foot, was unable to utilise a holiday in pursuit of my favourite small game, viz., snipe. About nine miles from Hunsur lay a chain of small tanks, on which, when snipe shooting, I had seen a number of teal, and these, when disturbed on the lower tanks, flew up, I observed, to a very small one which was the uppermost in the chain. I arranged, therefore, to send natives with muzzle-loading guns and powder, one to each of the lower tanks, with instructions not to permit the teal to remain upon them, but to keep them moving. With a tennis shoe on my wounded foot, I rode some nine miles to the small tank at the head of the chain, under the embankment of which stood, in a convenient position, a splendid, shady tamarind tree. I took the precaution of posting two natives, at some distance apart, on the grassy sward beyond the tank, and not too close to the latter. These men had orders to remain where they were unless and

until they should see my head appear above the embankment, when they were to close in to the edge of the tank, and so put up any teal which might have settled upon the latter out of shot from my post.

The whole plan worked admirably, and I had lots of shooting up till lunch time, after which my chances were few, the birds having been driven by the firing to more distant tanks, where they could rest undisturbed. From my post by the tamarind tree, I bagged that day forty-four teal and one duck. The teal were all of the garganey or blue-winged species, with the exception of a single *Q. crecca.*

I once had a day with the late Mr. U., of the 19th P.W.O. Hussars (recently, alas! killed in action) on a very large tank in the Chitaldroog district of Mysore, which, though the bag of duck was small, dwells in my memory as a very enjoyable one. The tank was so extensive that a number of guns would have been required in order to do justice to it; whereas U. and I, with the assistance of Mrs. U., who remained on the embankment and kept firing shots from a 28-bore, had to do the best we could in the reeds by the margin. Wild geese and flamingoes were on the tank, but these, rising high in the air, departed at the commencement of operations. We had no boat, and when the duck and teal sought safety in the centre of the huge sheet of water, I fired bullets from my express rifle to stir them up. Up to lunch time, we shot round the tank, and after-

wards went to look for snipe. Our bag for the day was eighteen ducks and teal (one of the latter being shot by the lady) and twenty-two and a half couple of snipe.

Sportsmen should not permit natives to swim out into tanks which are full of weeds, in order to recover fallen birds, since many men have lost their lives through being entangled in the dense growth.

CHAPTER XXIV.

THE FORESTS, PLAINS, AND HILLS OF MYSORE, THEIR DENIZENS, AND THE FAVOURITE HAUNTS OF THE LATTER

THE province of Mysore, which is under native rule, is an elevated table-land, varying in altitude for the most part from 2,500 to 3,000 feet, its lowest point being 1,800 feet above sea-level. It comprises an area of almost exactly 2,700 square miles. Its chief town, Bangalore, which is a large military cantonment, lies within ten or eleven hours' journey by rail from Madras, and stands at an elevation of 3,000 feet.

There is, as compared with the plains of other parts of India, practically no heat to complain of in this climatically favoured province; and though, of course, in March, April, and May the temperature is high for Mysore, the fact that, even at this season, punkahs are required nowhere but in dining-rooms, speaks for itself. English light summer tweeds form, even in the hottest weather, the apparel of the European male sex in Bangalore.

The rainfall of the province is but moderate, averaging only some forty inches in the open country, though on the hill ranges and in the large

forests, twice that amount, and in some places much more than twice, is often registered as the year's supply.

Mysore is rich in magnificent forests, which offer to the lover of big-game shooting a splendid field for sport in its most interesting and exciting forms, and under pleasant conditions as regards temperature.

It is easily reached by rail from any part of India, and the haunts of large game are at quite convenient distances from the railway lines.

The large military cantonment of Bangalore is but eighty-seven miles distant by rail from the native capital—Mysore—which gives its name both to the district in which it is situated, and also to the whole province.

How long those forests will continue to hold out attractions to the sportsman remains to be seen ; but since gun licences are being issued broadcast, and the cost of one is so small, that any native, however poor, can obtain a permit, while people belonging to meat-eating castes are very numerous in Mysore, the game is doomed ; though some time must necessarily elapse before it will become so rare as to be no longer worth the trouble of seeking.

One has only to read old sporting books, and even so comparatively recent a one as Mr. Sanderson's, and to know the forests as they are at this day, to fully appreciate the terrible rate at which game has decreased, and is ever decreasing, in Mysore.

According to the forest rules in force there, no

one may enter a State forest for any purpose whatsoever *except that of shooting.* Thus, any idle, loafing vagabond, who dislikes work, can, by shooting, say, even two or three hinds or does in a month (he probably shoots a good many more), and by selling the meat, earn far more money than he could do by honest labour. When once game has been so diminished in quantity as to render this province a barren field for sport, the stream of rupees from outside, now annually flowing into the country from sportsmen who visit it for shooting, will necessarily be diverted to other parts.

From a sportsman's point of view, the forests of Mysore may be conveniently classified as (1) State deciduous, (2) District deciduous, (3) Fuel, and (4) Evergreen.

THE FORESTS OF THE MYSORE DISTRICT

The forests of the Mysore district belonging to class 1 form a continuous belt along the Malabar frontier. They are the forests of Metikuppe, Karkenkotta, Begur, Ainurmarigudi, Berrambadie and Bandipur, which last, however, is situated partly on the frontier of the Nilgiri district. The first of these, viz., the Metikuppe forest, is about forty-six miles distant from the town of Mysore, *i.e.*, some ten miles beyond the travellers' bungalow of Antesunte, which is thirty-six miles from the capital, on the high-road to the western coast. To shoot this forest, a tent should be pitched at Bissalwaddie, and if during the hot and dry weather,

a cask of good water, mounted on a cart, should accompany the camp. Twelve and a half miles along the road beyond Antesunte, is the Karkenkotta travellers' bungalow, in the forest of that name. Within a few hundred yards of the high-road flows the Cubbany river, in which mahseer run to an enormous size, though they are very "dour" to take, and, except by means of night-lines, I have heard of no one having any real success therein, with the single exception of Mr. M., whose narrow escape from death at the horn of a bison has been narrated when describing sport with that animal. He had a coracle brought from a long distance, and, fishing from it, secured some magnificent mahseer, up to, if memory serves me truly, sixty-two pounds in weight.

Beyond the Cubbany river lies the Begur forest, and to reach it from the Karkenkotta side, the river must be crossed. This can be done by means of a raft at a place called Nissen, only about a mile from the Government road, the cart-track to it diverging from the latter nearly half-way between Antesunte and Karkenkotta. Carts must be taken over unloaded, and the cart bullocks be either made to swim, or taken over separately on the raft; the loads must also be similarly conveyed, and the carts reloaded on the other side, so that the operation is one which occupies a good deal of time. There used to be a forest lodge at Nissen, and probably it is still in existence.

After leaving the Government road between Antesunte and Karkenkotta, the Begur, Ainurmarigudi,

and part of the Berrambadie forests must be traversed ere another Government road be encountered, viz., that from Mysore to Manantoddy, which passes through the Berrambadie forest, in which, close to the road, there is (or was) a forest lodge called Moluhollay. There are, however, cart-tracks through the forests, though after heavy rain it is advisable not to overload the carts, and, further, to have in reserve two or three loose pairs of buffaloes, to render assistance in case of need.

Bandipur forest marches with Berrambadie, but to reach the Bandipur travellers' bungalow—forty-nine miles from Mysore, on the road to the Nilgiris—from Moluhollay, two sides of a triangle have to be traversed.

Goondulpet, on the direct road from Mysore to Bandipur, is about thirteen miles from the latter, and about twenty-two miles from Moluhollay; but thirteen miles from Moluhollay, and nine miles from Goondulpet, is a travellers' bungalow called Maddur at which the journey can be broken.

The game animals inhabiting these forests are elephant, bison, tiger, panther, sambur, bear, spotted deer, muntjac and four-horned antelope. Mousedeer also are plentiful, but are rarely seen, though their tracks are frequently visible.

Since I left the Mysore district in which these forests are situated, and before the death of the late Maharajah of Mysore, some portion of this area was made into a "Maharajah's reserve." Whether this distinction has since been preserved,

I know not; but a timely request, addressed to the Private Secretary to H.H. the Maharanee Regent, for permission to shoot in the reserve (even should it still exist) would probably be granted.

All the above-mentioned forests, with the single exception of Begur, which, owing to the great preponderance of bamboo therein, is good only for elephants, are excellent ground for the sportsman, bison being plentiful in them.

Another considerable tract of forest is that which extends from Atticulpoor, in the Chamraj-Nagar taluq of the Mysore district, to the Mysore boundary upon the Billiga-Rungun hills.

Atticulpoor is about forty-five miles from Mysore on the Coimbatore road. Now that coffee plantations have been opened upon the Billiga-Rungun hills, the shooting upon the latter is no longer what it once was, and this tract is also much poached by native shikarries.

The jungle men inhabiting those hills are called Sholagas, and though some of them are useful assistants to the sportsman, they will neither eat the flesh of a bison, nor even bring in the head of a slain bull.

Personally, I much prefer to shoot bison where, as in the case of the forests previously mentioned, the jungle men will prevent any waste of the flesh by cutting it all up and drying it in strips for future use, the whole of the carcass being thus utilised.

These forests contain timber trees of many valuable species, chief in value amongst which

are the teak (*Tectona grandis*), the honne (*Pterocarpus marsupium*), and the blackwood (*Dalbergia latifolia*).

The timber is of very mixed character, any one species never monopolising any portion of forest to the exclusion of others, though occasionally, and over limited areas, the bamboo-cane practically usurps the whole of the ground.

The nature of the forest varies greatly with each change in site, locality, elevation and soil. In low-lying, well-watered and sheltered situations, the mixed timber is very fine, except where deficient natural drainage or unsuitable soil prevents the thriving of timber species, in which cases small trees of no utility take their place.

Bamboo in large clumps is extremely prevalent; in some places, as above remarked, forming the major portion of the jungle; in others, occurring mixed with timber trees; while here and there, where it is altogether absent, the pleasant variety of open timber forest affords a wider scope for vision than can be obtained amongst the dense cover afforded by the bamboo—particularly in its younger stages.

In high, exposed portions, little arboreal vegetation is observable, except in the sheltered hollows; while in parts, where rock occurs immediately below the surface of the soil, the growth is necessarily stunted and poor.

Rivers, streams, and nullahs intersect the forests, and afford water for their human inhabitants and for their wild denizens.

Unless the efforts of the Forest Department to prevent fire should be successful (they necessarily are sometimes the reverse, especially in the case of the large forests on the frontier), the forests take fire in the hot season, *i.e.* between February and the end of April, when the ground is strewn with the dry leaves of the now leafless trees, and when the rank growth of grass has dried up to so high a pitch of desiccation, that a spark falling upon the ground, if fanned by a light air, will suffice to set many square miles in a blaze.

The reason why the efforts of the Forest Department to ensure fire protection in these forests are so often but partially successful, lies in the fact that the forests are inhabited by a jungle tribe whose services are quite invaluable to the department, who perform all the work required by the latter, and who alone can live, or find their way, in these vast solitudes. The Forest Department can prevent fires from spreading into its reserves from unprotected forests of its own, or from Her Imperial Majesty's forests across the frontier; it can also isolate the dwellings of the jungle tribes by clear belts across which fire cannot pass; but it *cannot* prevent fire spreading from sparks dropped from the torches of these jungle men, and carried by them as a protection against wild beasts when they move about after dark, nor from careless dropping by them, in the daytime, of fire carried for the purpose of lighting their tobacco which they smoke from a green leaf twisted into a conical form. It were the rankest heresy to question the advisability

of fire protection, and its probable advantage in the case of arboreal growth in India; but it is a self-evident fact that fire protection, unless it be uniformly successful and continuous, becomes more disastrous in its effects upon a forest into which fire may have entered after a year or two of immunity, than its total neglect would have been; for, from the comparatively small amount of inflammable matter which results in a single season, an annual fire which would have but little effect upon *healthy* standing trees would, in the latter case, do little damage, while in the former, the large accumulation of dry vegetable matter causes a fire of far more scorching power and destructive effect.

Forest officers were formerly fond of trying to account for jungle fires, by the theory of their reputed spontaneous generation, owing to the friction of dry bamboos. It is hardly necessary, however, to state that such a theory is entirely false and untenable; the only ordinary origin of fires being *fire itself*, and their only possible natural source being lightning, any spontaneous ignition due to the latter being, however, rendered *most improbable* from the fact that lightning is usually accompanied by rain in forest tracts.

Occasionally a combination of circumstances occurs which renders fire protection an easy matter, or, rather, which of itself prevents fires from occurring in the forests, viz., when abnormally late rains in one season are so closely followed by exceptionally early ones in the following year that the grass does not entirely dry up. The early

showers fall in April and May, and immediately, in any areas which may have been burnt, cause the springing, from the moistened soil manured by the ashes of the burnt grass and leaves, of a new growth of rapidly-rising, succulent grass—a great blessing for the game after their short commons during the hot weather. This is, perhaps, the most unhealthy season in the forests of the low country, for the light rains serve to stir up, and to liberate, gases generated by the decay of organic matter, without being sufficient to also wash them away.

Between the 25th of May and the 15th of June may be expected the burst of the south-west monsoon (when the wind sets in steadily from that quarter) which is usually ushered in by heavy rains. These, washing all the deleterious matter out of the soil, render the jungles healthy and free from malaria. This is the time for the sportsman who values his health, and who wishes to enjoy big-game shooting in these lovely forests without fear of fever, so long as he acts prudently and takes due precautions.

The grass now grows rapidly, and by the end of the following month will, in places, be several feet in height.

The south-west monsoon continues till about September or October, when the wind veers round to the opposite quarter, and the north-east takes its place. July is generally very wet, August rather less so, while in September comparatively little rain falls, and the drying up of the jungles begins. Now again an unhealthy season commences, and

the forests, unless heavy and frequent rains should fall during the north-east monsoon, remain malarious until the advent of the next south-west monsoon, or, should fire protection fail, until the burning of the jungles in the dry weather renders them temporarily salubrious.

The forest revenue obtained from the large timber reserves consists mainly, of course, of the proceeds of the sale of timber, chiefly of the three species named at the commencement of this chapter, with the addition of matti (*Terminalia tomentosa*). There are, however, certain minor items, such as beeswax and honey from the combs of wild bees, myrabolams, gum, etc., which contribute their quota of revenue.

Important, however, as are the Mysore timber forests, whether regarded from an economic or a climatic point of view, the lighter belt of small jungle between them and the cultivated land, pieces of small jungle in the interior, and the hedges of the cultivated fields as well, yield a product which is by far the most considerable item of forest revenue, and one of which the Mysore plateau may almost be said to enjoy the monopoly. This item is sandalwood, which grows freely in the light scrub jungles of Mysore, and which is of extremely high value in several European markets on account of the scented oil contained in its heartwood. Sandal (*Santalum album*) is a tree of small stature, having diminutive, pointed, dark green leaves, and it grows most freely where it is shaded and protected by the proximity of other trees or

of thorns. It is impatient of injury by cattle and by fire, and, requiring shade while young, grows well in clumps of thorny bushes. As the essential oil, upon which its commercial value depends, is developed only in the heart-wood, the growth of the tree should not be too rapid, and hence sandal-wood from dry, stony situations is more valuable than that grown in moister localities and in richer soil, although in the latter case the trees grow to far larger dimensions.

Sandal trees are not felled, but are uprooted, the roots containing much oil, and being, therefore, very valuable. The mature trees, after being uprooted, are divested of most of the valueless white or sap-wood, and are then carted to the nearest sandal store (or "kothi" as it is locally termed) to undergo the preparation necessary before sale. In the kothi, the trunk is sawn into lengths; the outside portions, consisting of any still adherent white wood and a little heart-wood, are removed by adzing, and the lengths, or billets, are planed, and finally smoothed by the use of sand-paper. The branches are similarly treated, and the roots divested of bark and white wood, their interstices being at the same time freed from any adherent or contained soil. All the different products of manufacture are separately stored, the billets and chips being sorted into various classes, and a largely attended auction sale is held annually in each kothi, at which lots of convenient size (from three to seven, and in the case of chips many more, tons) of each class are exposed for

purchase by the public. Sandalwood is used in India for carving and ornamental purposes, by Hindoos for marking their foreheads, and for burning with the dead on the funeral pyre, by Parsees in fire worship, and for the extraction of oil as a perfume; while it is used in European countries for the extraction from it of a perfectly pure oil for use medicinally, the samples obtainable locally being usually very much adulterated.

The beeswax obtained from these forests is made by three different species of wild bees, but the only one which yields any considerable quantity is the large and savage *Apis ferox*, whose combs are hung upon branches of forest trees or under overhanging rocks, and are often of very large size. A second species—a tiny bee about half the size of a common house-fly, and devoid of a sting—nests in hollow trees, and yields a small quantity of honey of excellent quality; while a third, rather larger than the preceding, nests in holes in the ground.

Myrabolams are yielded by a small tree termed the gall-nut tree (*Terminalia arjuna*), which produces an exceedingly precarious crop, varying in marketable value year by year in inverse ratio to its quantity, and whose value also depends to some extent upon the size and condition of the nuts composing it.

A species of plant belonging to the ginger tribe yields the wild or jungle saffron, which is used in cooking and in colouring the skin; but its marketable value is now so low as to produce little more than

enough to recoup the expenses incurred in its collection and carriage.

Until some twenty-five years ago, the operations of the Forest Department were confined to the collection and sale of timber, sandalwood, and other produce, and to the prevention of smuggling; but about that time planting operations were begun, and are now prosecuted upon a large scale all over the province.

Teak, honne, and blackwood are easily raised from seed sown in nurseries, and, if properly transplanted, bear the operation well; but sandal is a very delicate plant, being impatient of transplantation, and requiring shade while young. It is therefore more advantageous to propagate sandal by *in situ* sowings, in suitable localities, on properly prepared ground.

The propagation of gall-nuts requires special treatment of the fruit, from which the hard fibrous husk must be stripped, and the contained hard nut well soaked in water, before the latter can be sown with reasonable hopes of satisfactory and speedy results. If the fruit be sown without such removal of the outer husk, germination is extremely retarded, and only an infinitesimally small proportion of the contained seeds produce plants.

The forests of the Mysore district are singularly deficient in orchids of conspicuous beauty, though there are many small, insignificant, epiphytal species, and one or two larger and more showy terrestial ones. In Northern Mysore, however, there are a few showy epiphytal orchids.

Creepers, pleasing to the eye, are likewise absent, while those which strangulate trees, and are by no means objects of beauty, are very common. One handsome climbing lily, the *Gloriosa superba*, is, however, found in light forest tracts, its fantastic crimson and yellow blossoms often appearing at a height of six or eight feet above the ground.

On the whole, the forests cannot be considered rich in floral gems, though there are some flowers worthy of notice to be found in them. One feature in the flora of these forests is the great preponderance of species of the natural order Leguminosæ.

Butterflies—some of them very large and conspicuous—are to be seen in numbers in suitable localities and under proper conditions; but, though they doubtless exist, and would be found if diligently sought for, showy beetles do not as a rule obtrude themselves upon the notice of the casual observer, though now and then he may come across one which may seem to him worthy of preservation.

Chief amongst the human inhabitants of the forests are the Kurrabas—a shy, timid race, living entirely in the jungles, and subsisting in great part upon honey, roots, and fruits gathered in the forests by themselves and at no expense, assisted by grain and tubers raised by them in clearances made in the forests, and by the flesh of wild animals secured by various primitive devices.

The origin of the Kurrabas is shrouded in mystery. It is impossible to state whether they are, or are not, an aboriginal tribe. It is probable that until the creation of the Forest Department

they knew little about money, and seldom possessed any; but the more civilised families amongst those who work for that department are now keenly alive to their own interests in this particular, and they have been so systematically swindled by native subordinates that their morals have to some extent been corrupted, and cases of their attempting to outwit their oppressors by practices the reverse of straightforward, are not uncommon, even amongst this simple and naturally well-dispositioned people.

There are, amongst the Kurrabas, two separate tribes which do not intermarry, and which differ in the fact that one tribe is rather more civilised than the other. These tribes are termed respectively the "Bett" (or hill) Kurrabas, and the "Jain" (or honey) Kurrabas. Of these the former is the more civilised, and certain families amongst them have even begun to settle in villages outside the forests, and to work in the fields as farm labourers.

The ordinary attire of a Kurraba inhabiting the forests is a strip of dirty cloth round his loins—a simple dress of most economical character, light and airy, and affording free play to all the limbs. The women wear a cloth of larger size, but equally dirty, and, as they run away and hide, should a European approach their humble dwellings, it is not often that they are seen by the sportsman shooting in the forests which they inhabit.

Kurrabas are very thankful for a blanket, should one be presented to them, and the most civilised among them are beginning to take a pride in dress, and even in dressing their hair neatly—the head-

dress of a wild uncivilised member of the jungle fraternity consisting of loose, shaggy locks, well matted with dirt, and innocent of the comb.

The word "Kurraba" in Canarese signifies a shepherd, so it seems possible that the jungle tribes bearing this appellation may originally have been a race of pastoral origin, but if so, their habits have been entirely changed by residence in the forests. Certain it is, that at one time there was a powerful race of Kurrabas, presided over by a Kurraba king, but whether the jungle Karrabas are, or are not, offshoots from that race, is not known.

Kurrabas are usually of small stature and of miserable physique, with tiny limbs which look as if their possessors would be unable to either walk far or to carry any weight. In this respect, however, appearances are very deceptive. I have known a little man of this tribe, who was only two or three inches above five feet in height, walk all day long, carrying for a great part of the time an 8-bore rifle of fifteen pounds in weight.

In disposition, Kurrabas are the mildest, gentlest, and most peaceable people whom I have ever met. Crime amongst them seems to be almost unknown. They never go to court, and, in fact, would bear in silence any injury or oppression rather than visit the dreaded town with its "busy haunts of men." If the poor Kurraba be ill-treated and bullied beyond endurance by less primitive natives, he possesses but one remedy, viz., flight, and he seeks no other.

A Kurraba's notions of the value of money are

very vague; he is only too happy to obtain all the advances which he may be able to extract, and such ready cash enables him to fuddle himself by purchasing and drinking the fermented juice of the toddy-palm, in which his simple soul delights; and until the money so obtained has been exhausted, not a single day's work will he do. His knowledge of accounts is so limited, that he falls the easiest of prey to the wily rogues who visit the forests with stores of cloth to sell to the simple Kurrabas at exorbitant prices, and happy the scoundrel who can get the poor jungle men deeply in his debt. Fortunately, however, he is sometimes checked in his extortionate proceedings by his victims—who have probably already paid far more than full value for what they have received—leaving their humble abodes, and going away to a distant forest, there to make new homes for themselves, and to escape from the extortions of their oppressor. The huts in which the Kurrabas live are of the simplest possible description. A few poles, some bamboos, grass, and mud are all the materials required for their construction; and as they are very low and small in size, the abandoning of one settlement, or "hâdy," and the formation of one elsewhere, entail but little labour upon these expert woodmen.

The State forests of this district consist, generally speaking, of heavy forest; while the district and village forests, between them and the cultivation, are of lighter growth, becoming sparser and poorer the further they recede from the State forest line.

There are, however, exceptions in each case to this general rule.

Though the elephant and bison chiefly frequent the State forests, still they are often to be found in many parts of the district forests; and similarly, though the proper home of the tiger, spotted deer, and panther is the lighter belt (which includes the greater proportion of the district forest area), all these animals are to be found in parts of the State forests also.

Of the forests in the Mysore district, Bandipur always seemed to me to afford the greatest variety of game. This forest, a portion of Karkenkotta, near the Cubbany river, and the tract at the foot of the Billiga-Rungun hills (which last is, moreover, the best bear country in the district) are the best localities for spotted deer.

All the State forests of this district, with the exception of Begur, are excellent bison ground. I have seen these animals in the Begur forest too.

Tigers and panthers are to be found in suitable jungles all over the district, but the best localities for bagging them in this country, in which it is difficult to bring them to the guns by beating, are the lightly-forested areas near Hunsur, Humpapur, Heggadavancotta, Maddur and Atticulpore. One very likely spot is *Naganipur*, to which, from the Mysore - Bandipur road at Begur (twenty-seven miles from Mysore), a road branches off at right angles. This Begur is a good place for antelope shooting, and is nowhere near the forest bearing

the same name. In the Naganipur jungles, tigers as well as panthers are to be found, and I have had sport there with both.

THE FORESTS OF THE KADUR DISTRICT

The Kadur district is reached by rail from Bangalore, whence a journey of about ten hours takes the traveller to the town of Kadur. From this, the district headquarters—Chickmaglur—is twenty-five miles distant, but if the traveller's destination be the large bison forests, he should not get out at Kadur, but go on by rail to Birur a few miles further down the line.

The Kadur district, in its western extremity, includes a portion of the Western Ghauts (a high hill range), in which bison abound, and where they can be stalked when out grazing on the grassy opens which alternate with the densely jungled sholahs. In this part, and also in some other portions of the district, evergreen forests are found. Before attempting an expedition upon the Ghauts, however, the sportsman should make the acquaintance and engage the good-will of some of the planters in this district—a very fine set of hospitable, manly, good fellows—without whose kindly aid he could do little or nothing there, and who, he must remember, have to live in the country, and are dependent for sport upon the game in the vicinity of their estates, in which they therefore possess a vested interest.

The principal low-country forests of this district

are Lakwallie, twenty-two miles from Birur railway station,—where there is a travellers' bungalow outside the forest, and a forest lodge in the heart of the latter—Muthodie, beyond Lakwallie, and Tegurgudda beyond Muthodie. Tigers, as well as bison and deer, inhabit these forests, but the first are not easily met with.

Lakwallie is a very large forest, the *State reserved* portion of which covers an area of forty-seven square miles. These three forests are all very thick, but bison abound in them, as also in the horse-shoe at the foot of, and formed by, the Baba Booden hills. Bison are no longer to be found on the grassy slopes on these hills, as they once were (Colonel Pollock mentions having seen them there in 1870), but are numerous in the forested area at their base. The Lakwallie teak plantations often hold a tiger (I shot two in them upon different occasions when beating for deer, or for anything that might chance to appear), and spotted deer and sambur are numerous therein, as also in many parts of the forest.

I believe that only two elephants remain in this and the adjoining district of Shimoga. There used to be a considerable herd frequenting impartially these two districts, but they became very troublesome to the roots and destructive to crops, and permission was therefore given to the late Major P., of the 21st Hussars (now Lancers), to shoot some of the largest, which he accordingly did. The balance of the herd, with the exception of the above-mentioned two animals, was subse-

quently captured in a kheddah in the Shimoga district.

Another good locality for spotted deer and chinkara, is Yemmaydodie kaval one march from Kadur; and, as there is a Public Works Department's bungalow on the ground, no tent need be taken. Spotted deer are also numerous between Sacrapatam, on the Kadur-Chickmaglur road, and Santaweri, on the road from Chickmaglur across the Baba Booden hills, as also in the vicinity of the Iyenkerray tank. Chinkara and antelope occur between Kadur and Chickmaglur, and I have shot the latter while staying at the Kadur bungalow, though one usually has to ride some miles out from thence in order to find them. There are often tigers in the district forests near Tarikere, on the road between Kadur and Shimoga.

THE FORESTS OF THE BANGALORE DISTRICT

The forests in this district consist for the most part of scrub jungles, and tracts in which the arboreal growth is more suitable for fuel than for any higher purpose, with the single exception of Kankanhully which is a timber forest. Bamboo is prevalent in parts, and a feature of the district is the great number of rocky hills, rising abruptly from the plain, and clothed with thorny jungle wherever there is any soil to support the latter.

Bangalore is not a good district for shooting, but a tiger has very occasionally been shot at Closepet, on the line of rail between Bangalore and Mysore,

(I have myself seen one near Bidadi, the next station in the Bangalore direction), and there are panthers at both of these places as well as in many other parts of the district.

I have also shot a tiger near Magadi, only some thirty miles as the crow flies from Bangalore; and in the Savandroog forest, round the base of the high rocky hill of that name, there is always a *chance* of bagging one, though the jungle is so continuous, that it is extremely difficult to locate a tiger and to get him driven towards the guns. I tried upon two occasions to bag panthers at Bidadi by beating, but though upon each attempt one of the animals was seen, no one obtained a shot at it.

There are bears in parts of this district, but game animals generally, even deer, are so scarce therein, that it would not be worth a visitor's while to waste time there, since good shooting grounds lie within such easy reach.

CHITALDROOG DISTRICT

Although, as I have said elsewhere under "Antelope," it would be worth the while of no one who intended to visit the north, to shoot antelope in Mysore, yet in the case of a sportsman who might be unable to go north, and who could not spare the time to go to either the Bellary or the Guzerat districts, but who might wish to bag a few black buck heads, a visit to this part, where the heads are certainly larger than I have seen

them anywhere else in the Mysore Province, would be worth paying.

There is much antelope and chikara ground in the Chitaldroog district, which consists largely of open plains, and which is on the line of rail from Bangalore to Bombay—the antelope being found quite near to the railway line, as well as in the interior.

My best bag of antelope—viz., twenty-four black buck, together with one buck chikara and two bustard—was made in seventeen days' actual shooting in this district, in the vicinity of Hosdroog.

THE FORESTS OF THE SHIMOGA DISTRICT

Shimoga, the headquarters of the district of the same name, lies on the high-road, only twenty-four miles from Tarikere, in that of Kadur. This district contains the best localities for tigers in the Mysore province, but bison are found in only two of its State forests, viz., Sacrebail, which is nine, and Shanker, which is seventeen miles, respectively from Shimoga. Tigers are found in both of these forests, as well as in Gangavansara twenty-three miles, Kardibetta the same distance, Kukuvada-Ubrani twenty-two miles, Kunchinballi eight miles, Kumsi eighteen miles, Malandur thirty-four miles, Nasrur twenty miles, Puradhal eight miles, and Umblibail and Humsi Kutti ten miles respectively from the district headquarters.

For working Gangavansara, Kardibetta and Kunchinpalli, tents are required, but for all the

other forests, owing to the proximity of travellers' bungalows and inspection lodges, they need not be carried unless a party should go together, in which case the accommodation afforded by the buildings might be insufficient. It is, however, always convenient to take one or two tents in case of necessity.

Deer, etc., are to be found in all the above, as well as in a number of the other forests of this large district.

THE FORESTS OF THE HASSAN DISTRICT

About three miles from the railway station of Arsikere, the State forest of Hirikalgudda commences. There are three forest lodges on the demarcation line which measures twenty-one miles round, and tents may also be pitched on a table-land in the centre of the forest. This forest contains tigers, bears, panthers, deer, etc.

The same animals are also to be found in a long range of forest some twenty miles in length, and from two to five miles in breadth, of which the State forest of Seegadagudda forms one portion, the remainder consisting of district forest and Amrut Mehal kavals (*i.e.* grazing grounds for the Government cattle department's use). Tents are required to work this tract which commences about fifteen miles from Hassan.

In the Ghaut forests of the Munzerabad taluq, which borders upon the Imperial district of South Canara, the same game animals, with the addition

of bison, are to be found, and to work these, tents should be taken. Here, again, no move should be made without the friendly aid of one or more of the planters having been promised to the visitor. In parts of the Hassan district, antelope inhabit the open plains.

The principal small game of the Mysore province are snipe, jungle-fowl, spur-fowl, bustard, the lesser floriken, partridges, sand-grouse, quail, wild geese, ducks, and teal of various species, also hares.

I append a few Canarese words and phrases which are likely to be of service to a sportsman who is ignorant of that language, and who may wish to shoot in Mysore or Canara. The Canarese equivalents for the English words are written as phonetically as possible, no attempt being made to adhere to the Canarese spelling.

NAMES OF LARGE GAME ANIMALS

English.	Canarese.	English.	Canarese.
Antelope .	Jinki and Hoolay-kerra.	Hyæna .	Cut-keerba.
Bear .	Kurradee.	Muntjac .	Kard-coorie.
Bison .	Kartee.	Panther .	Keerba, Ibba, Mutt-naie.
,, bull	Kworna.	Pig (wild)	Kard-hundee.
,, cow	Yemmay.	Sambur .	Kurrowvee.
Elephant .	Arnay.	Spotted deer .	Sargar, Marnoo.
,, Tusker	Kombin-arnay.	Tiger .	Hooly, Dod-naie.
Four-horned Antelope	Kard-coorie.		

CANARESE WORDS

NAMES OF MISCELLANEOUS ANIMALS

English.	Canarese.	English.	Canarese.
Buffalo	Kworna.	Domestic sheep	Coorie.
Dog	Naie.	Hare	Molla.
Wild dog	Kard-naie.	Young one of all animals	Murree.
Domestic cattle	Dāna.	Male of ditto	Gundoo.
Domestic bull	Guli.	Female of ditto	Hennoo.
Domestic goat	Ardoo.		

A FEW COMMON NOUNS

English.	Canarese.	English.	Canarese.
Arm	Toloo.	Fish	Meenoo.
Back	Bennoo.	Flesh	Marmsa.
Bag	Cheela.	Foot	Pada.
Bamboo	Bidaroo.	Footprint	Ajjie.
Bird	Hukki.	Ford	Kadavoo.
Blood	Ruttar.	Forest	Kardoo, Pareest.
Brain	Medooloo.	Fowl	Kolee.
Bread	Rōti.	Fruit	Phala, Khaie.
Bullet	Goondoo.	Fruit (ripe)	Hunnoo.
Butter	Benne.	Hand	Kye.
Camp	Mūkkarmoo.	Head	Tollay.
Cart	Bandi.	Heart	Hardaya.
Cartridge	Tota.	Hill	Betta, Gudda.
Cholera	Sunniroga.	Horn	Komboo.
,,	Vantibhādi.	House	Munnie.
Darkness	Kuttarle.	Jungle	Kardoo.
Day	Deevasa.	Knee	Monakarloo.
Ear	Kivi.	Ladder	Yaynee.
Eye	Kunnoo.	Leg	Karloo.
Fault	Tuppa.	Lie	Poie.
Ferry	Kadavoo.	Light	Belakoo.
,,	Tari.	Man	Arloo.
Fever	Jowra.	Mangoe	Arm.
Few	Swelpoo.	Medicine	Owshada.
Finger	Beraloo or Bettoo.	Mile	Kulloo (literally stone).
Fire	Benky.		

English.	Canarese.
Milk	Harloo.
Money	Hunna.
Moon	Candra.
Morning	Bellige.
,,	Wottāre.
Mouth	Byee
News	Vurtamārna.
Night	Rart.
Nose	Mūgoo.
Order	Appăne.
,,	Hookoomoo.
Peacock	Nowlo.
Plain	Beiloo.
Potato	Aloogudde.
Rain	Mollay.
River	Hollay, Nuddy.
Road	Marga.
Rock	Kulloo.
Rupee	Rupaiye.
Salt	Oopoo.
Shot	Cara.
Sickness	Roga.
Snake	Ow.
Spot (on animal)	Mutt.
Stick	Komboo.
Stone	Kulloo.
Sun	Suriya.
Tank	Kerray.
Tent	Dehra, goodara.
Throat	Guntloo.
Tongue	Narlige.
Tooth	Halloo.
Town	Ooroo.
Tree	Morrer.
Truth	Neeja.
Tusk	Komboo.
Village	Grama.
Water	Neeroo.
Wind	Gharli.
Wound	Ghyar.

NOTE.—To form the plural add the affix "galu" to the singular noun.

PRESENT IMPERATIVES OF A FEW VERBS

English.	Canarese.
Be careful	Jagrate iroo.
Be silent	Summane iroo.
Bring (a person)	Kurrukondoo, bar.
Bring (a thing)	Tegadadu Kondoo, bar.
Call	Kurree.
Come	Baroo, bar.
Cut	Koyyoo.
Cut	Kutarisoo.
Do not	Baydar.
Eat	Teenoo.
Feed	Sakoo.
Find	Kanoo, Sikkoo.
Follow	Himbasiloo.
Give	Kodoo.
Go	Hogo.
Hold	Hidee.
Inquire	Vicarisoo.
Lift	Yettoo.

CANARESE WORDS

English.	Canarese.
Make	Mardoo.
Must (in combination)	Baykoo.
Put	Harkoo.
Remain (or stay)	Iroo.
Remember	Nenapoo mardoo.
Run	Ode hogo.
See	Nordoo.
Shoot	Ēse
Shout	Koogoo.
Speak	Martardoo.
”	Hayloo.
Take	Tegge.
Throw	Bisardoo, Ogee.
Tie	Cuttoo.
Wait	Kayu.

EXAMPLES OF A FEW OTHER TENSES

English.	Canarese.
Has become	Aietoo.
Has come	Buntoo.
Has died	Settoo hoietoo.
Has gone to sleep (or lain down)	Nintaietoo or Nin- [too.
Has hit	Bidto.
Has missed	Tuppaietoo or Bidit illa.
Is	Oontoo.
May be	Irabhodoo.

A FEW ADJECTIVES

English.	Canarese.
Bad	Kettoo or Kettadoo.
Black	Koppoo.
Blue	Neela.
Brown	Kandoo.
Cold	Tannagada.
Deep	Āla.
Far	Doura.
Good	Wollay or Wollaydoo.
Green	Hasaroo.
High	Ettara, Unnata.
Hot	Bissey.
Large	Dodd, Doddadoo.
Long	Oodda.
Many	Rumboo.
Much	Bhālar.
Near	Huttra.
”	Huttrakke.
Red	Kempoo.
Shallow	Uttana.
”	Ālavillada.
White	Billi.
Yellow	Arasina.

Adverbs derived from adjectives generally bear the affix "Ārge," *e.g.*, Badly = Kettārge.

PERSONAL PRONOUNS

English.	Canarese.	English.	Canarese.
I	Narnoo.	It	Ădoo.
Thou	Neenoo.	We	Nava.
You	Neevoo.	They	Āvaroo.
He	Āvanoo.	They (neuter).	Āvoo.
She	Āvaloo.		

SOME MISCELLANEOUS WORDS

English.	Canarese.	English.	Canarese.
About	Sumāroo.	Near	Bali.
After	Turuvaya.	No or not	Illar.
From	Add "inda" to name of place, *e.g.*, Mysore-inda = from Mysore, except where euphony requires "dinda," *e.g.*, Chamraj-nagardinda = from Chamrajnagar.	Now	Ippo.
		Outside	Horage.
		There	Ulligee.
		Till	Tanaka.
		Under	Kellagee.
		Upon	Mayley.
		Where	Yayley.
		Why	Yartikke.
Here	Illigee.	Yes	Howdoo.
How	Hyārge.	Yesterday	Ninne.

A FEW PHRASES SHOWING FORMS OF COMBINATIONS OF WORDS

English.	Canarese.
The bullet has hit	Goondoo bid-to.
The bullet has missed	Goondoo Tuppaietoo, or Bidditilla.
The tiger is asleep, or is lying down	Hooli nintoo, or Nintaietoo.
The elephant is dead	Arnay settu hoietoo.
Bring water	Neeroo tegadukondoo bar.
The bison is a big bull	Kartee dodd kworna oontoo.
How far is Mysore?	Mysooroo yestoo doura?
It may be about ten miles	Sumaroo hutt kulloo ĭrabhodoo.

CANARESE WORDS

CARDINAL NUMBERS

English.	Canarese.
One	Wondoo.
Two	Yerradoo.
Three	Mooroo.
Four	Nalkoo.
Five	Eidoo.
Six	Aroo.
Seven	Yayloo.
Eight	Yentoo.
Nine	Wombuttoo.
Ten	Huttoo.
Eleven	Hunnondoo.
Twelve	Huddinyerradoo.
Thirteen	Huddimooroo.
Fourteen	Huddinalkoo.
Fifteen	Huddineidoo.
Sixteen	Huddinaroo.
Seventeen	Huddinyayloo.
Eighteen	Huddinyentoo.
Nineteen	Huttumbuttoo.
Twenty	Ipputtoo.
Twenty-one	Ipput-wondoo.
Twenty-two	Ipput-yerradoo.
Twenty-three, etc., etc.	Ipput-Moorow.
Twenty-nine	Ipputtumbuttoo.
Thirty	Mowatoo.
Forty	Nalvattoo.
Fifty	Eivattoo.
Sixty	Aravattoo.
Seventy	Yeppattoo.
Eighty	Yembbattoo.
Ninety	Tombbattoo.
One hundred	Nooroo.
One thousand	Savira.

Note.—To form ordinal numbers, substitute "āne" in place of "oo" as an affix to the cardinal, *e.g.*, First = Wondāne.

CHAPTER XXV.

HINTS ON CAMP EQUIPMENT, SERVANTS, TRAVELLING IN INDIA, ETC.

TENTS

ALTHOUGH I have elsewhere indicated my own preference in the matter of tents, individual views and tastes are so diverse, that, before setting himself up with these indispensable articles, I would recommend a sportsman to write to the Elgin Mills Company, Cawnpore, for their illustrated catalogue, and from it he can then make his selection. He must do this with special regard to the country to be worked, and the means of transport therein available.

CAMP FURNITURE

Camp furniture should be obtained in India, and, to save the expense of carriage by rail over a long distance, had better be purchased at the nearest large town to the starting-point. Native servants are very careless, and to avoid subsequent breakage during marches, the furniture, though it must, if intended for use in hilly country, be light, ought also to be strong. All should of course be capable

of folding into a small space, and excellent folding tables, chairs and cots, from which the sportsman can select whatever kinds he may prefer, are made in the country.

THE CAMP MEDICINE-CHEST AND HOW TO USE IT

This should contain whatever laxative may prove most satisfactory in the case of the individual sportsman (I personally pin *my* faith to *compound liquorice powder*, in doses of one large teaspoonful each) and some *strong purgative* (such as pills containing a little croton oil) for use when necessary by the servants. Too great attention cannot possibly be paid in India to the interior economy of the body, more particularly in feverish localities. *Castor oil* is an excellent and safe purgative, but I am personally unable to take it owing to the nausea which it causes.

In case of incurring fever, *quinine*, *Java Hari*, and *Warburg's tincture* are most useful, also *phenacitine* (or *antipyrin*) as a sudorific. A fever patient should be put at once to bed, well covered with bed-clothes, and encouraged to drink freely in order to induce perspiration. Ten-grain doses of antipyrin will accelerate this result. As soon as the temperature of the body has fallen (as shown by the clinical thermometer which should find a place in the chest), quinine may be administered in ten-grain doses thrice daily, but must, in the absence of skilled medical advice, never be given while fever is actually raging. After profuse

perspiration, great care must be taken to prevent the patient from incurring a chill.

The native patent medicine named "Java Hari" can be safely taken while fever is on, and I have often used it, with apparently useful results, in the case of native servants. Warburg's tincture has often proved very valuable in cases of obstinate continued fever which would not yield to other remedies, and is taken during its continuance. I used to carry this medicine, but happily never had occasion to use it.

I generally, in the case of natives, began the treatment of that horrible disease, dysentery, with a dose of castor oil, followed, after this had thoroughly acted, by *chlorodyne.* The best treatment of this ailment, however—in addition to the avoidance of all solid food (except a little toast or bread), which must in every case be insisted upon, the diet being confined to milk, cold beef-tea, cold soup, etc.—lies in large doses of *ipecacuanha*, and perfect rest. The patient should lie down as much as possible, and any semblance of a draught must be carefully avoided. The sportsman can take with him powders or capsules which his doctor will prescribe, containing as much ipecacuanha as may be thought advisable in his case, and in the deplorable event of his incurring this troublesome and dangerous complaint, he should take them according to the directions given him by the medical man; and, when well enough to travel, should leave the jungles, and seek the nearest place where he can obtain medical

attendance. I always carried with me in camp a small bottle of pure *carbolic acid*, in case of being mauled by an animal, and though I never had occasion to use it in my own case, I was, by having her wounds well syringed with a two per cent. solution of this drug, enabled to save the life of a favourite dog which had been horribly mauled by a panther. I recommend every sportsman who is in pursuit of dangerous game, to carry a bottle of this, and a syringe wherewith to inject a two per cent. solution of it to the full extent of the wounds, should one of the party unfortunately meet with an accident.

In case of toothache arising from a hollow tooth, I know no better remedy than a drop or two of the purest carbolic acid on a tiny piece of cotton-wool inserted in the hollow. A pad of cotton-wool should be placed inside the cheek on the same side, and the patient should stand with his mouth open, allowing the saliva to run freely to avoid any burning of the mouth or tongue by the acid.

In case of diarrhœa, it is advisable in the first instance to ascertain its cause. It may be due to some internal irritant, in which case castor oil should be administered; or to a chill, when thirty drops of chlorodyne in a wineglassful of brandy and water is a good remedy, which can, if necessary, be repeated a few hours later.

For external use, in case of injuries other than those caused by wild animals, *homocea* is a valuable remedy, as is *sulphate of zinc ointment* in the case of cuts. *Elliman's embrocation*, of the strength

recommended for use upon horses and cattle, is valuable in the cases of rheumatism and of bruises. In the case of ulcers, carbolic acid is useful. For colds, I am a great believer in quinine, taken, as soon as the malady is detected, thrice daily. It is usually unnecessary in India to carry any solvent for quinine, as the juice of one of the limes so largely used in native cookery will dissolve it. *Eucalyptus oil*, taken internally on sugar, is also good for colds, and I have derived much relief at home recently, in the case of heavy head colds, by the use of *menthol snuff* combined with doses of quinine taken thrice daily.

Some lint, cotton-wool, two or three bandages, and a pair of scissors will complete the necessary list of contents of the medicine-chest which need be carried by a healthy man, though, should any sportsman be liable to suffer from an ailment which requires special remedies, the latter should of course be taken in addition to those named above.

In case of sunstroke, the patient should be undressed, and a cold water douche, from a height of three or four feet, applied to the head, neck, chest, and all over the body. Two grains of *calomel* may be thrown on the back of the tongue, and, after consciousness has returned, five grains of antipyrin may be administered. An attack of sunstroke appears to predispose the patient to further seizures of the same malady, so that exposure to the sun should be avoided after anyone has once suffered from this complaint. The tabloid is the most convenient form in which the majority

of medicines which should find a place in the camp medicine-chest can be carried and administered. Messrs. Burroughs, Wellcome & Co., Snow Hill Buildings, London, E.C., make up convenient tabloid chests of sizes to suit the requirements of all classes from the cyclist to the explorer.

CAMP SERVANTS

In engaging servants for a shooting trip, the sportsman should be careful to select only those who have been well accustomed to travelling, and it is, of course, a great advantage should he be able to secure any who have previously travelled in the locality in which he intends to shoot. Directly it is known in the bazaar that servants are required by him, a number of them, each bearing a lot of certificates, will appear and offer themselves for employment. Regarding these certificates, a word or two of caution is necessary for the enlightenment of the newly-arrived European in India. Not only does a "sahib," who has found a servant most unsatisfactory, in the softness of his heart at the moment of parting with the "boy," not infrequently present him with a written character far better than he deserves, but very often the characters produced for the sportsman's inspection do not refer to the bearer thereof, but to some other servant from whom their bearer has bought, hired, or borrowed them, simply adopting the same name as that mentioned therein. Then, again, fictitious characters are written (for a consideration) for servants by

loafing rascals who would commit any villainy for a fee. All these tricks make it very difficult to distinguish between the false and the true, and a personal recommendation from any previous employer (or an intimate friend of the latter) is worth a whole sheaf of the often very dirty scrip.

It must be borne in mind, in engaging servants for camp work, that it by no means follows that a really excellent headquarters "boy" will be at all a shining light in camp. Having had myself, ever since my marriage in 1885, to keep two sets of servants when in India, I have had considerable experience of the way in which good camp boys often fail when tried in headquarters, and also conversely. In the case of cooks—in my opinion the most important of Indian servants—this characteristic is curiously accentuated. It is very easy to comprehend why a good station cook, capable of preparing a dinner of which his master need not be ashamed, if taken out to camp with but few appliances wherewith to work, should fail to give satisfaction; but it is less facile of comprehension why a really good camp cook, if employed at a pinch when his master is in headquarters, with a good cook-room and all the necessary utensils and materials, should be unable to do even as well as he can, with but a very limited amount of the latter, when in camp, and yet I have in practice found this to be the case, and much of the sportsman's comfort will depend upon his securing a really good specimen of the genus cook, species camp-understanding.

The servants of the north greatly differ from those employed in the south of India.

In the north, the majority of domestic servants are Mahomedans, and, personally, I prefer these, as being men possessed of far more self-respect than members of the class from which the servants of the south are drawn. Moreover, any Mahomedans who are strict disciples of the Prophet are strict teetotallers, whereas drink is a terrible curse amongst the servant class in the south of India.

In the south, the majority of the domestic servants are pariahs, or outcasts, the representatives of which class in the villages have quarters in a separate part thereof, are not permitted to mix with the inhabitants possessed of that wonderful Indian fetish, caste, and who are horribly foul in their manner of life, not even scrupling to eat domestic cattle which have died natural deaths, or have succumbed to disease. A primitive pariah will even move right out of the way, should he meet a Brahmin, for fear of his very shadow falling upon and polluting so holy a being.

It is not to be wondered at, in so very conservative a country as India, that the servant class, though for many generations they have been domestic servants, and far too well fed to hanker after diseased flesh (in the case of a large number, moreover, rejoicing in the profession of some form of Christianity), should, with such traditions, be less self-respecting, and therefore less reliable, than are Mahomedans; and when

the influence of the demon drink, from the sale of which the Government derives so great a revenue, is superadded, it will be seen at a glance that the pariah, or native Christian servant of the south, can scarcely be expected to be so trustworthy as is the Mohamedan of the north.

Excellent servants are to be found in Madras, as also in other large towns in the south; but such can usually obtain congenial and well-paid employment in those towns, and are generally, even if found when temporarily disengaged, unwilling to risk their health in, or to undergo the privations and (to them) monotony of camp life.

The first demand which a servant will make on being engaged will be an advance of half a month's wages. In every case the sportsman must insist upon retaining, as some small security therefor, the chits, or written characters, which the boy will have presented for his perusal, the same to be carefully kept and returned to the latter when his services are dispensed with.

As stated elsewhere, a suit of warm clothes and a blanket, and in wet weather a cheap waterproof coat and turban cover also, should be given to each servant before he leaves headquarters for the jungles, or hills, as the case may be.

The only domestic servants which a single sportsman in the south need take into camp with him are, a head boy, or "butler," and a cook. As, however, servants are terribly liable to suffer from fever, etc., when in the jungles, the head boy must also be a capable cook, and it will add to the

master's comfort, if he should take as well a third servant who is able also to cook a little in case of need. For each horse or pony which he may take out, he will require a syce (or groom) and a grass-cutter (usually the wife or female friend of the syce), except in localities wherein grass can be purchased in camp, in which case I should recommend that the grass-cutter be dispensed with.

A Mahomedan, if procurable, or, failing him, a native of some sort who is thoroughly versed in the pitching, packing, and drying of tents, should accompany the camp, and in places in which the sportsman travels by bullock-coach, he can be occupied during marches in driving the latter.

If two or three sportsmen should be out together, one personal servant apiece, with a cook and an under servant, in addition to the horses' attendants, will be ample for comfort. In the latter case, one of the personal servants must be entrusted with the general care of the camp arrangements and of the table, and the others be clearly made to understand that they are to obey him.

The usual wages of the different classes of servants in Southern India, while in headquarters, are appended, the rupee being calculated as equivalent to one shilling and fourpence. It must be remembered, however, that all servants expect a special allowance to cover the additional cost to which living apart from their families (if they possess such), and in some cases the higher price of provisions in out-of-the-way places, may entail upon them. This used to cost me, in

the case of upper domestic servants, about two-pence a day, and in that of lower ones and of syces, one penny per diem in addition to their monthly pay.

		Rupees per mensem.
Butler in headquarters	. .	14 to 16
Head matey	,, . .	12
Under matey	,, . .	10
Cook	,, . .	14 to 16
Syce	,, . .	7
Grass-cutter	,, . .	4
Tent lascar	,, . .	8

When two or more sportsmen go out together, one member of the party should undertake sole responsibility for the commissariat. If this be not done, and a constant check thus imposed upon pilfering and waste, not only will it often be found that supplies ample for a month will disappear in less than half that period, but, if the head boy be entrusted with the catering, he will wait until he has entirely, or almost entirely, run out of some essential item, before informing his master that more of it is required.

For the carriage of sugar, rice, ghee (clarified butter, used in lieu of lard in cookery), curry powder, flour, salt, pepper, mustard, etc., I recommend strong wooden boxes fitted with tin canisters, unless in the case of ghee, salt, pepper, etc., for which strong glass jars may be used. A strong wooden box lined with tin should also contain potatoes and onions. All such boxes should be fitted with padlocks and keys of not too common

a design (the Yale padlocks are excellent), and if the member of the party who has charge of the stores should call up the cook every morning directly after breakfast, give the latter the keys, and tell him to take out all his requirements for the day in his presence, he will find that the few minutes thus spent will be very well paid in economy in use of the articles.

The keys should never be given to the servant for use unless in his master's presence, and after the former has taken what he requires, the latter should see the boxes locked up again, and resume possession of the keys.

All wines and spirits must be kept carefully locked up, and when a bottle of either has been opened, it should be secured with a "bottle-lock," which can be bought at any of the large shops in the country. This will prevent not only theft of the liquor and the possible temporary incapacity of the boy, but also the addition to the former of water (frequently dirty) with the object of concealing the peculation.

In travelling in India, it is not only unfeeling towards the servants to expect them to make long marches, in a broiling sun, along hot roads, but also bad policy from the standpoint of their master's own comfort, such being very liable to cause illness in the case of people of generally very poor physique. Care should therefore be exercised to see that carts enough are provided for the carriage, not only of the camp requisites, but also of the servants, who, however, take up very little room,

and can squat for hours together in a position which would soon become agony to a European.

A native servant, in the south, who does not drink, is a great treasure, and when once secured should be retained as long as possible, much being, if necessary, forgiven him in consideration of so valuable a trait.

TRAVELLING TO AND IN INDIA

Should a sportsman from England wish to visit Bengal, or the north of India, he will probably prefer to go by one of the Peninsular and Oriental S.S. Company's vessels from Marseilles or Brindisi to Bombay, and to travel thence by rail to the nearest point at which the latter approaches his destination. He can, however, should he prefer to do so, go the whole way to Calcutta by sea, and commence his rail journey there.

If, however, his destination be the south of India, and if he should be so unfortunately constituted as to be liable to sea-sickness (from which I personally suffer whenever there is the least excuse for so doing), an expeditious route, with a minimum of sea, is the following. Sending his heavy luggage to the agents at Liverpool a week or ten days before one of the steamers of the Bibby Line is timed to leave that port, and ascertaining on which day the vessel will reach Marseilles, he can join her there, and thus avoid about a week of sea, including the oftentimes turbulent Bay of Biscay. The steamers of that

line are fine, large, well-appointed ships, with all arrangements for the comfort of passengers. A journey of seventeen days' duration will take him to Colombo (the capital of the island of Ceylon), whence one night's journey by sea, in one of the British India steamers which ply between that port and Tuticorin, will put him down at the latter whence he can travel by rail.

In railway travelling in India, it is practically necessary to travel first class. Even this will not secure the traveller from the intrusion of a possibly scantily-clad native, whose manners and customs may be the reverse of agreeable to the former. It is high time that the railway companies should provide separate first-class accommodation for Europeans and for natives, and permit none of the latter, except such as may have adopted English costume, to enter the carriages reserved for Europeans.

Before starting on a railway journey in the plains of India, the traveller should ascertain whether ice is carried on the train for supply to the passengers, as, if not, he will find a box of it, taken with him, a great comfort, and he should not omit to also take some soda-water and a tumbler. Having reached the termination of his journey by rail, the sportsman's means of transport thence will depend entirely upon the means available in the locality, which he will have to ascertain.

As is elsewhere stated, in Mysore and other parts of the south, a comfortable bullock-coach for his own conveyance can be hired either for

a single journey, or at a monthly rate if retained; while carts drawn by bullocks will convey his baggage and servants, one of whom, however, should travel on the box of his master's coach with the driver. If the sportsman has taken with him a horse or a pony, or has arranged to hire one in the nearest large town to the area to be worked, he can, if he should choose so to do, dispense with the bullock-coach, though the latter is a great comfort in wet weather, and also a convenience when travelling by night. Personally I can sleep splendidly while travelling by bullock-coach.

Before starting on his journey from the nearest railway station, the sportsman should ascertain what travellers' bungalows, and at what distances apart, lie along the roads which have to be traversed by him *en route* to his shooting grounds; and also, in the case of each, what necessaries in the way of furniture, etc., are provided, as bungalows are by no means uniformly provided with necessary kit. Thus, should cooking utensils and crockery be not provided in all of those in which he proposes to halt, the traveller must take sufficient of them, and of supplies for the journey, with him in the coach; or, should he be riding, then in one of the carts. In the latter case, it is better to have the small stock of necessaries which he will require before he reaches his destination and pitches his camp, packed separately in one or two boxes, to avoid as much as possible unpacking and repacking while travelling.

All rifle- and gun-cases should be strong, and capable of standing, without risk of breakage, the wear and tear of cart travelling, and possible careless packing and handling.

In travelling, the sportsman should personally superintend the loading of his carts, to prevent ponderous articles being placed upon light and fragile packages.

CHAPTER XXVI.

RIFLES AND GUNS, AMMUNITION AND ACCESSORIES

IT would be invidious, where so many firms of gunmakers are capable of turning out first-rate weapons, to select any of them for particular mention; but, especially where weapons for use upon big game are concerned, a few words of caution and advice to the beginner may usefully introduce this chapter.

In the first place, the sportsman who may wish to shoot large game will do well, so far as his pocket will admit, to purchase only *the very best* weapons. By the "very best" is meant, not necessarily the most expensive, but those whose accuracy, power, and mechanism leave nothing to be desired. They may be of quite plain finish, but they *must* fit the intending user, be suitable for use upon the game which he is likely to encounter, shoot as straight as any weapons of the same bore can be made to do, and their locks, fittings, and actions should be of the very best types.

Cheap double rifles for large game cannot be relied upon, and few men who value their lives

in the case of dangerous game, or who want to make the best use of their opportunities in the case of other animals, would care to trust to single barrels.

The process of laying together a pair of barrels, so that both will shoot accurately from the same sight, is a laborious and expensive operation; while the skilled, and therefore highly-paid, labour which must be employed in securing that extreme nicety of fitting of the different parts—a *sine quâ non* in securing absolute smoothness and uniformity in working, perfect balance, and longevity—precludes the possibility of any gunmakers being able to turn out the very best class of weapon at even a comparatively cheap price.

None of the leading firms, whose reputation amongst sportsmen is known all over the world, will allow a weapon which has not been thoroughly proved to leave their establishments; so that in buying from one of the leaders of the profession the purchaser can be sure of obtaining a really reliable rifle. With regard to rifles burning nitro powders, it would be most dangerous to purchase from any but the very best makers.

In the case of guns for small-game shooting, the sportsman will find that, to a great extent, the same principles apply; and although numbers of even country gunmakers can turn out good-shooting, good-looking, and reliable guns, at prices, too, to suit the respective pockets of their various customers, a great difference will be apparent between the cheaper and the more highly priced weapons

of the same firm. Without entering into the question of how the former are affected by use, only contrast the difference in the degree of pleasure which is afforded the owner of a well-built, well-fitting, accurately-balanced, and neatly-finished gun, who has for the nonce been compelled to take out for the day, say, a so-called "keeper's gun" in place of his own, even although the stranger may fit him well, and both weapons be equally effective and deadly when held straight. The sportsman will, in the matter of guns, probably "cut his coat according to his cloth," and buy the best which he may be able to afford. Personally, I prefer the hammerless ejector, but have not yet tried the single trigger.

If practicable, both rifles and guns should be made to order, and, in the case of the latter, the purchaser will do well to be fitted by actual practice at a shooting school with the adjustable "try-gun," to the merits of which, in securing a perfect fit, numbers of sportsmen (myself included) can testify.

ACTIONS FOR RIFLES AND BALL GUNS

For all weapons burning large charges of powder, there is no better action than that known as the double-grip lever, which, in efficiency and power, leaves nothing to be desired.

Provided that the Indian sportsman intends taking an ample battery, with, say, a couple of spare weapons in case of accident or loss, or even with-

out the latter in the event of his thoroughly understanding the mechanism of the hammerless system, and being able to take the locks to pieces and to re-adjust them, there is no reason why his rifles should not be built upon that principle which possesses many advantages over the hammer type. A sportsman, however, who is obliged to limit his battery to two or three weapons, will, in the absence of such special knowledge (which comparatively few possess) do well to order the simpler system, which is less liable to be affected by sand, rust, etc., as well as far easier to take to pieces and re-adjust, than is the hammerless.

THE ANTI-RECOIL HEEL PAD

This is a useful adjunct to all weapons burning heavy charges of powder. When I was upon one occasion knocked right over by the simultaneous discharge of both barrels of my 4-bore, the cartridges being loaded with ten drams of powder, and bullets weighing 3½ oz. each, the rubber pad prevented the slightest inconvenience to my shoulder.

EXTRA PARTS

Spare mainsprings, tumbler pins, and foresights, etc., with the necessary strong tools fit for the practical work of taking weapons to pieces and putting them together again, should be taken, and the sportsman before starting on his trip should learn how to use the tools with facility and efficiency.

RIFLE STOCKS

As a rule the stock of a rifle should be rather more bent than is the stock of a gun used by the same sportsman, the tendency of the latter in using a rifle being to shoot too high. Moreover, if a straight stock be used on a rifle carrying a heavy charge, the cheek is liable to suffer. Most sportsmen prefer a pistol grip on their rifle stocks, and this certainly affords a firmer hold.

HAMMER STOPS

Never allow stops to be fitted to any hammer rifle which is intended for use upon dangerous game, though for rifles meant for deer-stalking they are recommended.

SLINGS

It is only in the case of severe climbing, in the course of which the sportsman may require both his hands free, or in riding, that he will ever need to sling his rifle on his back. The loops for attachment of the sling should be made *flat*, thus obviating the rattling of rings or swivels.

RIFLE-CASES, ETC.

A convenient form of rifle-case is the "Shikari," made of *strong sole* leather; but to prevent any tampering with the contained weapon by inquisitive

natives, each case should be fitted with a padlock and key. As long as transport by bullock carts is available, strong cases of the ordinary make are preferable.

Every weapon should be fitted with barrel-rods covered with baize or flannel, and loose flannel bags for barrels and stocks are also useful.

For the barrels and external metal parts of rifles and guns, the best lubricant is vaseline; while for their locks and works, the purest and most refined Rangoon oil alone should be used.

RIFLE SIGHTS

In the matter of rifle sights, each individual sportsman of any experience has his own preferences, but for the benefit of the tyro a few remarks upon this subject may not be out of place.

It is obvious that a deep V backsight, however suitable for target shooting, would be quite out of place upon a sporting rifle which will be used at running as well as at standing animals; and even in the case of "bull's-eye shooting," many of the best shots elect to take aim over a plain bar in preference to even a broad shallow V, which, with a small central nick and a fine line down from the latter, is by far the best pattern of backsight for sporting rifles.

The foresight should be a small, fine, platinum bead, unless, indeed, ivory be preferred. If required, a folding sight for use after dark can be added, and elevated when needed. Any of the

leading firms can, if desired, fit any rifle with a telescopic sight, whereby great accuracy of shooting can be secured; but the difficulty of taking aim at running animals with such a sight is a serious objection to its use. Moreover, in the case of rifles firing heavy charges, this sight is not recommended.

A common fault in rifles is over-sighting. Considering that when still-hunting in the forests, as also when tiger, panther, bears or deer are driven out by beaters, very close shots are obtained, there is no advantage in the standing backsight of an express rifle being regulated to shoot at more than 100 yards. The majority of animals are killed at much shorter ranges, and for hill stalking and antelope shooting, when longer shots may have to be taken, two folding flaps for use at long ranges may be added. By target practice, the sportsman will soon learn how much difference in elevation is caused by taking the foresight fine, or the reverse, and he must always be on his guard against shooting over, since the tendency in shooting game with a rifle is to shoot too high. A standing backsight regulated for 100 yards will afford a better chance in firing at moving objects than one which is set for 150 or more yards, since the common error of shooting too high is accentuated in the case of running shots, owing to the difficulty of taking a sufficiently fine foresight. In firing from a hard, rigid rest, such as a rock or a log, it is necessary, in order to prevent the barrels from flying up at the shot, to interpolate some soft

substance, *e.g.*, a cap, or a large pocket-handkerchief well bunched up, between the barrels and the rest.

EXPRESS RIFLES

These, in spite of the recent introduction of the ·303 and ·256 sporting rifles, are still the weapons in most general use, by the majority of sportsmen who enjoy frequent opportunities of large-game shooting, upon the lighter and softer-bodied class of game animals; while the largest of these excellent weapons, viz., the ·577, is, with suitable bullets, very deadly when employed against even the ponderous section of Indian and African feræ.

The principle of the express proper is the enormous velocity imparted to a light, and more or less hollow bullet, driven by a very large charge of powder, causing the projectile on entering an animal's body (1) either to break up altogether, and thus to act like an explosive shell; (2) to break up partially, while the large solid base and a portion of the adherent anterior part of the bullet carries on; or (3) to open out in a mushroom-like form, and thus present a cutting surface equivalent to that of a bullet of much larger calibre. All these three results may be attained by the use of different bullets from the same rifle, and although in the case of each pattern the results attained will be less accentuated the greater the range at which the shot has been fired, and are moreover liable to variation when large bones are struck, their relative effects may be relied upon

when entering the vitals of an animal of the softer-bodied class at the same range. Expresses are generally made of ·360, ·400, ·450, ·500, and ·577 calibres. Given the same charge of powder and the same range, the larger and longer the hollow in the front of the express bullet, and the lighter therefore the latter becomes, the more the thinness of its walls facilitates its breaking up at ordinary ranges, or almost pulverisation if fired into an animal at very close quarters.

The above three results are the legitimate work of the express rifle with its proper bullets, though the weapon may be instantly converted into a hard-hitting small bore by the substitution of solid bullets, though this last is but a casual and secondary—albeit often extremely valuable—service which it is capable of rendering when desired.

In addition to its power, and the shock to the nervous system of an animal struck by its peculiar bullet, the express rifle possesses the further advantage of a comparatively flat trajectory owing to the great velocity of its light projectile driven by a large charge of powder. As has been said above, bullets of different weights may be used out of the same rifle, but as the latter will have been tested and sighted for but one of these, a slight increase of elevation will, in the case of long shots, have to be given when a heavier bullet is employed, and a finer sight be taken when a slightly lighter projectile is used.

The weight of Eley's papered hollow tube ·500

express bullet is only 340, whereas that of the long, canelured bullet is 440 grains; if, therefore, it be desired to use in a ·500 express rifle, tested with and sighted for the heavier projectile, a bullet weighing 100 grains less, the charge of powder must be reduced.

It is dangerous to trust to the 340 grain ·500 express bullet in tiger shooting, owing to the great risk of the bullet breaking up on impact before it has reached the vitals. Many tigers, however, have been killed with that bullet, which is all that can be desired for use upon antelope and small deer, while for tigers and large deer (*e.g.* sambur) the 440 grain bullet is infinitely more effective.

For Indian antelope shooting, the ·360 express in the hands of a good shot is, with bullets containing only a short hollow plugged with wood, quite sufficient; though some sportsmen prefer the ·400 or even the ·450, which latter, of course with suitable bullets, is also effective in tiger shooting.

The ·577 is, with suitable bullets, a most reliable weapon for use upon tigers and bison, and if loaded with solid bullets, it forms a serviceable second gun when the sportsman is in pursuit of elephants.

THE PARADOX GUN

This splendid weapon is the invention of Colonel Fosbery, V.C. Weighing, in the case of a 12-bore, but 7 lbs. or 7½ lbs., the Paradox shoots a heavy

conical ball with extreme accuracy up to 100 yards or more, while when used with shot, it is as effective as is a good shot gun. Its lightness, handiness and power render it a most valuable weapon for tiger or bear shooting, as also for use upon deer in forested areas, and for running shots up to 100 yards or so, it is to be preferred to any rifle.

Paradox guns are now made of 16, 12, 10 and 8 bores, but the 12-bore is the one in most general use.

The Paradox is rifled only at the muzzle, friction, and consequently recoil, being thus minimised.

ORDINARY BALL GUNS

Ball guns of 8 and 4 bores are very useful for elephant and bison shooting in thick forests, and, at the short ranges at which they are used, are quite sufficiently accurate. Smooth bores are much lighter than rifles of the same calibres, and a further advantage in the case of the former in close-quarter work upon ponderous animals, is the tremendous energy of the bullet owing to absence of friction. A 4-bore bullet striking an elephant's head rarely fails to floor him, whether the animal be brained or not.

Care must be taken in using guns or rifles of these calibres to invariably fire the *left* barrel first, as otherwise both barrels are apt to go off together, which, however, never happens when the trigger of the *left* barrel is first pulled.

RIFLES BURNING NITRO POWDERS

That these are *the* rifles for long-range shooting, such as hill stalking, is beyond dispute, the extraordinarily flat trajectory far surpassing all the hopes of sportsmen previous to their introduction.

There can be little doubt that the rising generation will live to see marvellous strides made both in the application of nitro powders to sporting rifles, and in the extension and improvement of the Paradox system of boring. Apart from the advantage of a small, handy weapon, with a trajectory so flat that accurate judging of distance is hardly required, combined with immense power, and (provided suitable bullets be used) tremendously destructive effect, the mere absence of smoke is itself a great boon. In thick, heavy forest, on a still day, the smoke from black powder often hangs so heavily as to obscure the animal fired at, as well as the intervening space, and this might cost the sportsman his life when attempting to kill, or at any rate to stop, a wounded animal of the dangerous class in the act of charging. Many an animal, which has not seen the sportsman at all, has charged the cloud of smoke by which the position of the enemy has been betrayed.

So far as the application of nitro powders to sporting rifles has at present gone experience proves conclusively: (1) that rifles made for large charges of such explosives must be much more heavily and powerfully built than weapons of the

same bores constructed for use with black powder; and (2) that only the cartridges specially loaded for them by the makers, and with which the weapons were tested, ought to be fired in them.

Whereas a given charge of black powder can, with very slight variation, be depended upon to give certain specified results, what might, and doubtless would by the majority of sportsmen, be regarded as very trivial differences in loading, will, in the case of nitros, exhibit very seriously diverse effects. For instance, the same charge of cordite, in a rifle of say ·450-bore, will give very different velocities and elevations, and gravely wide diversities in strain on action, breech-end and barrels, according to whether the cartridge-case carries (1) a cap constructed for cordite; (2) a rather too powerful cap; or (3) the ordinary cap. Further, the amount of air-space left between the powder and the base of the bullet governs, to a great extent, the combustion, and the amount of pressure which is exerted on the barrels. In addition to these factors, we find variations in cordite according to the degree of heat to which it is subjected, as well as to the amount of moisture which it contains.

All the above considerations should deter sportsmen from trying any experiments with cordite or kindred powders, from attempting to load their own cartridges with such, and even from purchasing loaded cartridges from anyone except the makers of their own rifles.

Taking the larger bores first, rifles burning

cordite and rifleite are now being made of ·400, ·450, ·500, and ·577 bores, but of two very different types. For instance, the more powerful pattern, of say ·450-bore, made to shoot a large charge of cordite, say 50 grains or more, and a heavy bullet with a velocity of 1,900 or 2,000 feet, the stress or strain of which charge is far more severe than that caused by five drams of black powder, has for safety's sake to be made much stronger, and therefore much heavier, than a rifle made for black powder. The lighter type, on the other hand, is built to shoot a charge of cordite powder large enough to give only the same velocity and strain as result from a charge of four drams of black powder. Now the strain in the case of the larger charge of cordite is from 50 to 100 per cent. higher than that of the comparatively small charge of the same, and one trembles to think what might happen, should a cartridge loaded for use in the heavier weapon be fired by mistake in a rifle of the lighter type. Yet this might very easily occur in the case of a powder taking up so little room in the cartridge-case as does cordite. The safest plan would be for the gunmaker to stamp the outside of every cartridge with the weight of the contained charge.

THE ·303 SPORTING RIFLE

The author has had no opportunity of trying the ·303 at game, but he was delighted with a double rifle of this bore by Messrs. Holland and Holland,

Limited, which he used at the running deer in the N.R.A. meeting of 1898.

Many other sportsmen have, however, used this charming little weapon on many kinds of game, and they appear to be unable to say too much in its praise. The following letter from that mighty hunter, Mr. F. C. Selous, shows his opinion of the rifle, and of Messrs. Holland's peg bullet used therein.

"BULUWAYO,

"*August 17th*, 1895.

"DEAR MR. HOLLAND,—I have now shot with the little ·303 rifle you made for me the following animals:

3 Sable antelope bulls.	1 Great crested bustard.
1 Sable antelope cow.	2 Sassaby antelopes.
3 Black wildebeest.	1 Leichtenstein hartebeest bull.
4 Bontebocks.	3 Reedbucks.
3 Blesbucks.	3 Steinbucks.
3 Springbucks.	2 Duikers.
2 Vaal rhebucks.	1 Crocodile.
1 Roan antelope bull.	1 Jackal.
1 Leopard.	1 Rock rabbit.
2 Koodoo bulls.	

"Briefly, I have found it a most *deadly little weapon*, and am more than *satisfied* with it. I killed every animal I hit, with one exception—a wart hog, whose hind leg I broke with a running shot. This animal I should also have got, but I had first (after wounding it) to go some distance after my horse, and then lost the pig's spoor.

"The hollow bullets are excellent, but I like your patent *Peg Bullets* even better. I killed the roan antelope bull with a shot in the chest at 300 yards. The bullet did not hit any bones (but the chest bones) but it *dropped him on the spot* and he died almost immediately, as the bullet

had passed through his heart. The crocodile I also killed dead with a *Peg Bullet* behind the shoulder. These bullets not only expand and make a very severe wound in large heavy animals, but they also expand very well in small beasts, such as jackals and rock rabbits.

"Please send me 500 more.

"Believe me,

"Yours very truly,

(Signed) "F. C. SELOUS.

"P.S.—You can make any use you like of this letter, as it is a simple statement of facts, which speak for themselves. I have no trouble in cleaning the rifle."

Major David Bruce, A.M.S., in the *Field* of May 8th, 1897, gives his experiences in Africa with a Holland ·303, which are extremely favourable. Although, as he most reasonably and justly remarks, he would not take the same liberties with dangerous game when armed only with so small a rifle as when he had in hand a ·577, the Major on one occasion killed a buffalo cow with a single Holland's special bullet from the ·303.

Many other sportsmen have testified to the admirable work done by this most powerful, accurate, and handy little weapon, whose flat trajectory, moreover, renders it extremely valuable for long shots.

Although I should consider no battery, for use in India or Africa, complete which did not include a double ·303, I would counsel the tyro not to allow his admiration for the weapon to induce him to use it upon large or dangerous animals which are ordinarily killed by much larger rifles.

It is true that many big beasts have been killed with the ·303, but experiments in this direction are better avoided, both on the score of cruelty to the animals, and upon that of danger to the sportsman. The ·303 in its proper and legitimate use will be found all that can be desired, but it is unreasonable to expect it to do the proper work of a bone-crusher of large bore.

With the object of meeting the views of some sportsmen who desire a weapon of the same type, but more powerful than the ·303, Messrs. Holland and Holland have lately built a rifle of ·375 bore, the velocity of which is the same as that of the former.

THE ·256 SPORTING RIFLE

I have never had the opportunity of trying the ·256 sporting rifle, regarding which the opinions of sportsmen who have used it are conflicting, some deeming it an excellent weapon for use upon deer, etc., while others do not believe in it.

CARTRIDGES

All cartridge cases, even 8- and 4-bores, should be made of solid brass. It is a good plan to have those of small bores soldered up in tin packets each holding twenty-five, and those of the larger calibres in similar packets of ten cartridges each, the number of the bore being stamped on the outside. An ample supply should be taken, and no attempt

be made to reload even brass cases with black powder, the risk of a miss-fire rendering such procedure very bad economy. Then again reloaded brass cases are apt to stick in the chambers owing to their having expanded when fired, and though this drawback can be coped with by trying all the reloaded cartridges in the rifle before use, the other and more serious danger, viz., the possibility of a miss-fire, remains, and is sufficient to more than counterbalance the saving in cartridge cases which reloading would effect.

For use out shooting, and to prevent the dinting of brass cartridges, carriers, made on the principle of the magazine, and the belt elsewhere described in this book, will be found useful, and can readily be made to order.

BULLETS

A few words on the subject of bullets may be of some service to the beginner.

So many, and so diverse in effect, are those on the market from which he must make his choice, that the *embarras de richesses* may well render his selection a matter of some difficulty.

The classes of bullets which a sportsman will select for his battery will, to some extent at least, depend upon the composition of the latter. A man who cannot afford a number of weapons may be compelled, as a makeshift, to make one weapon do the work of three, and in such case he will require different bullets for various kinds of game. To a certain extent, it is easy to guide him, for

spherical bullets of large bore hardened by the admixture of one-tenth or one-eighth of quicksilver (tin also will harden the lead, but it reduces the weight of the bullet) are the proper projectiles for use upon all animals of the ponderous type. But then comes in the powerful ·577 express, which, if made to burn 6½ drams of powder, will propel a large bullet containing but a small hollow stopped with a wooden plug, or a solid projectile, with great effect in use upon animals of the genus Bos.

Personally, I prefer the ·577 where bison are met with in fairly open country, and a regular bone-crusher—such as an 8- or 4-bore—where the same animals are encountered at close quarters in very thick forest.

For use upon the Indian elephant I found the 4-bore with spherical bullets most effective. As the Indian sportsman fires, at very close quarters, only at the brain of an elephant, a 4-bore bullet possesses ample penetration, while the weight of the projectile, and the large surface simultaneously struck by it, convey such a shock as rarely fails to floor an elephant, even though the brain be missed. This is, in my opinion, the one and only instance in which the 4-bore with spherical bullets possesses any advantage over the 8-bore Paradox gun, the latter being much lighter and handier, and possessing superior penetration as well as much greater accuracy than the former. In fact, for use upon rhinoceros and the African elephant (which is shot behind the shoulder) the 8-bore Paradox

appears, judging by the experience of great hunters who have tried both, to be far more effective than are rifles of 8 and 4 bore.

I have never personally tried the Paradox, but there is no doubt that it is rapidly superseding the rifle for use upon game which is shot at fairly close quarters.

Though a solid, hardened bullet, from an express rifle carried as a spare gun, may be useful at a pinch, few men of any experience would care to trust to such weapons for elephant shooting, though, of course, even the largest animals have been, and may be with luck, bagged with rifles of even ·450 bore.

The number of the bores of rifles and guns built for spherical bullets, such as 4, 8, 10, 12, etc., means the number of spherical bullets of the given calibre which theoretically weigh one pound avoirdupois. Practically, however, the thickness of the cartridge case makes it impossible for it to contain a bullet quite so heavy. For instance, the largest bullet which I could fire from my 4-bore, which took paper cases, weighed only 3½ ounces, and to get that bullet into the case, the mouth of the latter had to be pared down internally, and so made very thin. In the case of the small bores, *e.g.*, the various express, ·303, and other small-bore rifles, the decimal represents the diameter of the bullet in the fraction of an inch. Thus a ·500 bore bullet is half an inch in width at the base.

Great care must be taken in casting hardened bullets, as if too much antimony, tin, or quicksilver

be put in, the bullets become brittle, and so lose penetration when they encounter large bones.

In casting bullets with an admixture of quicksilver, the latter must not be added till the lead has been melted, as otherwise it would evaporate. After the molten lead is ready for the mould, the mercury should be poured in, mixed well with an iron rod, and the bullets cast off as rapidly as possible. Antimony is, however, easier to use, and is equally effective in hardening lead.

If tin (which is not recommended) be used to harden bullets, it appears to oxydize more readily that does lead, and upon re-heating any residue which may have got cold, it is better to add a little pure lead in order to avoid the risk of over-hardened bullets.

BATTERY FOR LARGE GAME SHOOTING IN INDIA

This is a somewhat difficult subject, owing mainly to the immense variety of game animals which inhabit the continent of India, but partly also to the individual preferences of sportsmen, as well as to the exceedingly variable limits of expense within which each individual may wish to confine himself. Then, again, comes in the personal equation. It is no fair argument that because A., a first-rate shot and very experienced sportsman, can kill any given class of game satisfactorily with a rifle of comparatively small bore, B., who is quite a beginner, ought to be able to do the same; and the latter will therefore do well to err

upon the side of too much, rather than too little power. He will soon feel his own way, and as his ability to place his bullet where he wishes increases, he may, *if he chooses to do so*, use lighter weapons.

Amongst all humane men who deprecate every moment's unnecessary pain inflicted upon the game which they may wish to secure, there can be but one opinion, viz., that the novice, at any rate, should use more powerful weapons than the past master, to compensate for his own deficiencies in the matter of "buck-ague," or over anxiety to bag. This last impediment to good shooting is, however, by no means confined to beginners. The keener a man may be, and the more enjoyment he may therefore derive from shooting, this element, though it ordinarily becomes tempered by fruition, may, if he be of an excitable and nervous disposition, affect him in a greater or less degree—whether he is personally conscious of its existence or no—throughout the whole of his sporting career.

Beyond certain limits, it is impossible for any one weapon to be really effective. Much may be done with it, however, which would be infinitely better accomplished with another rifle, and it then becomes, when used upon game rather too large or rather too small for it, a more or less unsatisfactory makeshift. For instance, bison have been killed with a ·500 express, whereas both a powerful ·577 and an 8-bore are infinitely superior weapons in bison shooting. On the other hand, antelope may

also be killed with the ·500, though either a ·303 or a ·360 express is a much better weapon in antelope shooting.

Again, that admirable weapon, the 12-bore Paradox gun, would be out of place in hill stalking when long shots must often be taken, nor, if used in elephant shooting, would it possess the tremendous knocking-down power of a 4-bore. Of course a Paradox of larger bore would be too large, too heavy, and unnecessarily powerful for use on tigers, bears, and deer, where the 12-bore Paradox is so effective, but would be a splendid weapon for rhinoceros, buffalo, and bison, and quite sufficient for elephant shooting, though the Indian sportsman of the present day is unlikely to have many chances of sport with elephants.

The sportsman must consider what game animals he is likely to meet with, and what amount of money he may wish to spend upon his battery, and then select the latter accordingly. If expense be no object, and if he should aspire to make a bag which shall include all species of Indian game, a comprehensive and efficient battery would be a pair of double ·303 sporting rifles; one double ·577 express, taking the long case and 6½ drams of powder; one double 12-bore Paradox gun; one double 8-bore Paradox gun.

If the sportsman is unwilling to incur the expense of two ·303 rifles he must needs be content with one. A pair is put down merely as a precaution against disappointment, should anything happen to the one in use, the above battery con-

taining no other rifle suitable for long range hill shooting at light-bodied game.

NOTE ON THE CLEANING OF SMALL-BORE RIFLES BURNING NITRO POWDERS

Cleaning is a far less easy operation when cordite, etc., is used, than when the fouling is due to black powder. Plenty of friction with the cleaning rod, supplemented when necessary by the use of hot water, and the application to the interior of the barrels after cleaning of a special preparation called "Nitroclene," are the most satisfactory means of keeping such rifles in good order. They should be cleaned as soon as possible after use.

CHAPTER XXVII.

HINTS ON SKINNING, AND ON THE PRESERVATION OF TROPHIES

ALTHOUGH in the body of this work I have given rough-and-ready methods, which I have personally employed for the treatment of skins, head-skins, etc., I am indebted to Mr. Butt, taxidermist, of 49, Wigmore Street, for the following up-to-date instructions on the subject :—

ON SKINNING MAMMALIA

Directly after the animal has been killed, the nostrils, throat, and any bullet-wounds should be plugged with cotton-wool or tow.

To remove the skin, place the animal on its back, and make a longitudinal incision with the knife along the centre line of the belly to the lower lip, which latter must be divided. In performing this operation, care must be taken that the hair along the line of incision be carefully divided, and not cut. Straight cuts through the skin may next be made along the inside of each leg as far as the claws, or hoofs, as the case may be. Next turn the skin back in every direction as far as the incisions made will admit of this being done, and free the legs

from the skin. Continue the longitudinal cut along the under part of the tail to its tip, and turning the skin back, strip that organ of it.

Nothing now remains but to remove the skin from the back and the head. To effect this, place the carcass on its side, and with the scalpel carefully separate the skin, drawing it towards the head. In skinning the head, great care must be taken to avoid the accidental making of any unnecessary incisions in or around the eyelids, nose, and lips. The ears should be cut off as close as possible to the skull, their cartilages being left in the skin.

The skin is now free from the body, and the next operation is to turn the ears inside out, and to remove from them, the nostrils, lips, and feet, all adherent cartilage and flesh.

Place the skin open on the ground, with hair side underneath, and carefully remove any flesh or fat which may adhere to it, scraping it well to remove all loose particles of underskin, or pelt.

ON PRESERVING THE SKINS OF MAMMALIA

The above operations being thoroughly performed, take a quantity of powdered alum (which must be used liberally) and a very small quantity of common salt, and rub these well into the skin, taking especial care to do this very thoroughly in the case of the ears, nostrils, lips, and feet, till the whole has been completely impregnated.

Allow the skin to lie, with the raw side uppermost, on the ground for an hour or two, and then

hang it up on a line or a branch to dry. The drying should, if possible, be effected in the shade.

If the specimen be not destined for mounting whole, the skin may be pegged out on the ground to dry, but the common mistake of unduly stretching it out of shape, in order to make it appear larger than it really is, should in every case be avoided.

As soon as the skin is thoroughly dry, it may be folded with the fur or hair inside, and so packed. Skins are best packed for sending home in a wooden box lined with tin, whose cover (of the same material) should be soldered on to the lining, thus rendering the case perfectly air-tight.

When it is intended that the animal shall be mounted whole, the leg-bones must be preserved. These should be separated from the trunk at the shoulder-joints and the thighs, and thoroughly cleansed from all adherent flesh, etc.

In every instance the skull should be preserved. To effect this, place it in boiling water for five minutes only in the case of small specimens, and ten minutes or more in that of larger ones, after which clean thoroughly, scooping out all the brains. Care must be taken not to lose any of the teeth.

In packing skulls, each should be separately tied up in paper, and marked with a number corresponding to that by which the skin belonging to it is indicated, and packed tightly moreover to avoid breakage of teeth, etc., through rolling about—a frequent source of disappointment.

Another excellent method for the preservation of skins of the mammalia, where it is practicable,

is the following, which may be confidently relied on. After the skin has been thoroughly scraped and freed from all adherent particles of flesh, etc., place it entirely in a cask or tub in which a pickle, consisting of one pound of powdered alum, half an ounce of saltpetre, and two ounces of common salt to each gallon of cold water, has been previously prepared, and well mixed. After the skin has been soaked therein for two days or so, it may be either hung up, or pegged out on the ground to dry, according to whether it is destined for mounting whole, or for retention merely as a skin.

In all cases, sportsmen should pack and forward to England as soon as possible any skins and heads which they may desire to preserve. Not only are insects very destructive to skins in India, but, in the hot and dry weather, teeth are very apt to split, and no process of which I am aware will prevent this.

In the case of very thick skins, such for instance as the masks of bison, the only method of preserving them is to shave the skin down, to about one-third of its original thickness, before applying preservatives or placing it in pickle, as the case may be. A good plan is to take a native chuckler (worker in leather) with the camp, but on no account, in such case, must he be allowed to work his wicked will upon the skins in his own primitive way. He should simply work under the sportsman's own eye, and be made to obey orders literally and promptly.

When it is intended to preserve the head of a hornless animal for subsequent mounting separately

from the skin, no incision through the under part of the neck and the upper lip need be made, since after the severance of the head in its skin, the latter can be drawn back over the face and separated without any further cutting.

Mr. Butt regards the use of turpentine as prejudicial, and that of arsenical soap as unnecessary.

APPENDICES.

THAMIN, AND THEIR QUEST.*

Of all the deer family Thamin or brow-antlered deer (*Cervus eldii*) are among the most graceful and beautiful, and least generally known of their species. They are found in Burma — from the Chindwin Valley to Tenasserim — in Siam and Manipur. On the immense plains of Lower Burma, which lie between the hills and the sea, they may be met with in considerable numbers. They seem to prefer the flat country, especially those plains where a dense growth of elephant grass occurs; this land affording good grazing and capital shelter. The peculiarity of this grass (*Saccharum spontaneum*, *S. procereum*, etc.) is its immense size, and the remarkable scarcity of trees amongst it. The grass, called by the Burmans "kiang," attains a height of eight feet and over, and possesses thick woody stems. During the dry weather fires occur, and on these clearings a short succulent grass springs up when the rains come, affording good pasture. In the wet season patches of low-lying ground become swampy which, when the dry weather comes, retain sufficient moisture for short grasses. These patches, called "kwins" by the Burmans, are much favoured by thamin, and it is in these localities the sportsmen may expect to find them. I have not heard of their being found in heavy jungle, "though in Upper Burma they are frequently met with in 'open tree' jungle, but probably only resorting there for shade and rest." (Evans.) In appearance a mature thamin stag is of a dark russet brown, which at a distance appears

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blackish. The coat is thick and shaggy, the hair being especially thick round the neck and down the spine; on the under part it is white and thinner. In height he stands from 10·3 to 11·2 hands, and weighs from thirteen to fifteen stone, and sometimes over. According to Veterinary-Captain Evans of Rangoon, who has probably shot more of these animals than anyone else, there are not two distinct kinds of thamin, as some sportsmen have assumed, the difference in colour, etc., being probably due to age, season of the year, and perhaps locality. The head is graceful, the peculiarity being the great development of the brow antlers. The main horns sweep upwards, outwards, and inwards, and the usual number of tines are ten, though often more are found. A good head will measure 36 in. to 40 in. between widest points, and from tip of brow-antler to tip of main, from 50 in. to 55 in. The difference between stags found in Upper and Lower Burma appears to be in colour and sweep of horns, those of the latter province being wider and more graceful. The hinds are a bright chestnut colour with fine hair, the calves being pretty little creatures, usually spotted white. Thamin are gregarious, and may often be met with in herds of twenty and over. Though found on the same ground as hog deer (*Axis porcinus*) they do not seem to mix. The best time of the year for a shoot is during the hot weather, March, April, and May, the stags not being out of velvet before the end of February. This means a fairly warm time, as the thermometer frequently rises to 104°–106° Fahr. during the afternoons, but as the heat is of the dry kind, and nights nearly always deliciously cool, it is not unbearable. I think Lower Burma affords better sport for thamin than any other part of the country, and travelling is easier.

To make a "bandobast" (expedition) for this particular sport does not present many difficulties; and, once in the locality we have selected to shoot in, the rest is easy. At fairly frequent intervals, Public Works Department bunga-

lows are met with. They are lightly-built houses, erected for the convenience of travelling officials.

Here one may put up for a few days, and make a change from camp life. As they are usually near a village where bullocks, carts, men, etc., can be procured, all of which are indispensable, it is sometimes wiser to make one's headquarters here than farther away in plain or in jungle.

In some parts of Upper Burma thamin are shot from bullock carts—a vehicle, by the way, of the most primitive form, and eminently calculated to jolt one's heart into their mouth, being innocent of springs. To this cart two bullocks are fixed, and leafy branches spread round the framework. The deer pay but little attention to it, though its progress is attended with much noise; but they are accustomed to see carts frequently, being the one means of transport the natives here possess. Very often one can get within range while the stag gazes curiously at its approach. I shot my first thus; but I must confess the method practised in Lower Burma commends itself more to one's sense of sport and fairness. Here the bullock cart takes us to the ground, and on sighting a stag, feeding probably in an open patch, or "kwin," we dismount and begin to stalk.

Another method is to shoot from an elephant. The deer do not seem to mind the sight and smell of one, as they frequently see wild herds on their feeding-grounds during the rains.

Supposing one has left camp or bungalow about 4.30 a.m., and arrive where we may expect to find game a couple of hours later, by now the sun is well up and getting warm. Thamin get very shy and nervous even at considerable distance after a day or two's shooting, so it is very desirable not to attract their attention. We will suppose our stag is feeding in a kwin. Frequently there is but scanty cover, and after some manœuvring, finding out how the wind blows and the best cover to make for, we begin the stalk through the long grass

(about one foot high). It usually means a pretty hot time before one is within range, as deer have the most aggravating way of moving on and on. How often, after a grilling time, with a fierce sun beating down on my head and back, have I got almost near enough to open fire, dripping with perspiration, and black as a sweep from the charred and burnt grass, to see some inquisitive hind come towards me, sniffing suspiciously, while her unconscious lord was quietly grazing just out of range! At this time of year the ladies appear especially on the *qui vive*, and many a hard hour's work has been quite spoiled by a hind scenting or seeing me, and giving the alarm. When disturbed they go off with big bounds, but soon settle down to a running trot, and strange to say, instead of making for cover, make for the open, halting now and then to see what caused the disturbance. On more than one occasion such a halt has proved fatal, for it gave me an opportunity for a long and perhaps a steadier shot than when I had just finished my hot crawl. A wounded stag always makes for cover, and once in the thick elephant grass it is almost impossible to find them. On these shoots one frequently comes across native fisheries (deep pools of muddy water, which they stock with small fish for drying), and at these very good hunting-dogs can be procured, especially in the Pegu District, where they have a famous breed of dogs. Sometimes we can recover our stag with their aid. Another invaluable "tracker" is the vulture, which abounds when there is anything to eat, though where they depart to when no carrion is about, is hard to say. One afternoon I wounded a stag badly, getting a good shot, after a long stalk, at about one hundred yards. I knew I had planted my bullet where I wanted to, and saw he was hard hit; yet he made a dash for the high grass, and, before I could get in another shot, had disappeared. I was shooting with a Lee-Metford ·303 and dum-dum bullets, and was disappointed with the result. I drove the bullock cart through and through the long grass, but

could find no trace of him. At last, evening coming on, and being a long way from camp, I had to give up the search and turn homewards, much to my regret, for he carried a fine head, and I was loth to lose it. Near by was a solitary dead tree, and on the top branch an evil-looking vulture was perched. My Burman tracker said he had marked the deer down, and that by-and-by others would come. Next morning, being on another part of the ground some distance away, I noticed a number of birds hovering over one particular spot. We steered towards it, and, as we drew near, clouds of vultures rose and settled again. I knew it was either my stag or a dead buffalo, frequently met with on these grounds; but they were so thick on the carcass that not until I had fired a shot and disturbed them, could I see what it was. To my delight it was the thamin—what remained! The bullet had entered in front of the shoulder, passing through the lungs and out behind the shoulder on the opposite side. With this terrible wound he had managed to reach cover and disappear. I found the lungs ploughed up and quite blooded. The exit wound was as large as a five-shilling piece, and a portion blown out of two ribs. I should mention what little meat remained, my Burman tracker carried off for drying.

I think the best weapon for this sport is a double ·500 or ·450 Express. An excellent gun is the "Jungle" Paradox, and one I found to do good work. I shot at first with a Lee-Metford ·303, using dum-dum and soft-nosed bullets, and although for long shots and straight shooting it probably cannot be beaten, yet I was somewhat disappointed with the results, for the only stags I lost were shot with this rifle. Unless hit in a vital part, the animal will manage to reach cover, and so lost, for it is surprising what an amount of killing a full-grown thamin requires. The dum-dum bullet makes a terrible wound, but I do not think it has sufficient striking power, and therefore the shock is not sufficient

to cause collapse. The effect of the heavier ball of the Paradox and ·500 Express I found quite the reverse.

Good water is a serious difficulty on these little expeditions, and arrangements must be made for a daily supply for cooking and other purposes. For drinking, either soda-water should be carried, or aerated water made from boiled water. In its unboiled state it is unsafe to drink. One little point requires mentioning, and that is to be on one's guard against snakes when stalking. These are very numerous, and comprise cobras, hamadryads, tic bolongas, etc. No one can shoot much in Burma without coming across specimens of each species, which, as they are all extremely poisonous, must be carefully avoided. The danger, of course, lies in one's relaxing their attention when stalking. It is a good plan to wear a pair of soft leather socks over one's ordinary ones, and putties from the knee down. With these precautions, and good boots, one is pretty safe, even if they did tread on a snake.

Burma offers a fine field for the sportsman and the naturalist. The former may obtain elephant, tiger, panther, the various kinds of deer, gaur, pig, etc., with a reasonable amount of trouble. Tigers are bold and numerous, and in May last, when in Rangoon, I heard of a tiger being shot within nine miles of the town. The country is picturesque, and the people interesting, but the "trackers" are somewhat lazy and indolent. During the months I have named the climate is excellent, though warm, and tolerably, if not altogether, free from fever. As I have said the nights during the hot weather are nearly always cool, and, in those parts I shot, I noticed an entire absence of mosquitoes, due probably to the scarcity of water.

There is no sensation more pleasing than the welcome rest which comes after a long day's stalk, and my mind goes back to a little camp, pitched in a grove of mango trees, through whose thick leaves the sun never came. To see this looming up, when one was tired and thirsty, was a welcome sight; and after a refreshing tub and a good

dinner (with hunger for the sauce) in which the most tasty parts of thamin figured in ways known to our native cook, with what contentment one settled into a long chair and enjoyed the after-dinner cheroot! making fresh plans for the morrow, and lazily admiring the beauty of the tropical night. It was all so pleasant, that when the end came we were unfeignedly sorry.

To Veterinary-Captain Evans my best thanks are due for permission to refer to his paper on "Thamin" in the records of the Bombay Natural History Society.

(Sd.) G. R. Radmore.

THE BANTING OR TSINE IN UPPER BURMA.*

Not much has been written about the banting, or tsine, as it is called by the Burmese, chiefly because it is locally confined to a few spots on the globe; and, unlike the bison, it very much objects to dwelling in the near neighbourhood of human habitations. It has thus happened that what little information we possess concerning the haunts and habits of this animal has come to us through sportsmen exceptionally favoured by circumstances, and, we should add, exceptionally tough, for the successful pursuit of tsine entails the roughest of camp life. The notes here gathered together have been made during the course of some years' sojourn in the jungles of Upper Burma, mainly in the Terai, at the foot of the Chin Hills. A description of the kind of country at the foot of these hills may, perhaps, be of interest. It is here that the plains of Upper Burma, and the steep, irregular slopes of the wild Chin Hills meet. The Chin Hills, through many streams, drain into the valleys of Burma; in these valleys there are vast plains of grass and stunted trees, over which the tsine roams; the country is of a prairie-like description, much broken up by ravines, some shallow, some deep. In parts of this undulating prairie—for it cannot well be called forest—it is possible to see for many hundreds of yards, and a shot has occasionally to be taken at such distances, there being no choice in the matter of a nearer approach. The grass in these plains is of a rather fine quality, almost equal in appearance to our own meadow grasses; the soil is a browny-

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red, and in some places almost a brick-red colour. The trees grow sparsely about these plains, and are almost all confined to the species indine, which grows to about thirty feet in height only, the soil presumably not being favourable to a luxuriant vegetation. It should be mentioned that a large river drains the valley, to the west of which lie the Chin Hills, the Burmese villages being almost entirely confined to the east bank of the river, a precaution necessary in times when the King of Burma ruled the land on account of the raids which the Chins made on the Burmans. I do not, however, think that this would entirely account for the almost total absence of Burmese villages and cultivations from the west side of the river, and the cause must, no doubt, be found partly in the poorness of the soil on that side. However this may be, it has been very acceptable to the solitude-loving tsine, which has roamed here between the river and the hills from "time immemorial." These plains soon became familiar to me after my arrival in the valley, as they are in the vicinity of forests where I have to superintend the felling of teak trees on behalf of the Bombay Burma Trading Corporation, who are known throughout the East for their wealth and enterprises in Burma, Siam, and elsewhere. As my work takes me into the jungle all the year round, I find exceptional opportunities for hunting big game and noting their habits. The great difficulty for a sportsman in Burma is the question of transport. In India coolies can, I believe, always be obtained, but in Burma it is quite otherwise; the inhabitants are few to begin with, and unfortunately payment, however liberal, has not the least attraction for them. The only way in which a man unacquainted with the language and country could get transport would be to obtain an order on village headmen through the Deputy-Commissioner to supply coolies, but it is rather doubtful whether the Deputy-Commissioner would even do this; certainly not at a busy time of year when crops were being planted, for would not that mean

loss of revenue to Government, the be-all and end-all of administration in Burma. This was never a difficulty for me, as the Corporation supplied me with two elephants to carry my camp when on tour. Of the many ways in which Englishmen pass their lives in all quarters of the globe, this is perhaps one of the wildest and most peculiar—the wildest because one's life is spent in nature's primeval forests, the most peculiar because it is practically a nomadic life. Englishmen are wonderfully successful in this kind of life, even getting to know the jungles as well as the natives themselves; thus do the old instincts of our ancestors reassert themselves. Engaged in this employment, a man will have his headquarters, or place where he lives and keeps his stores, about the centre of the district over which he has charge. From this place he starts on a tour of his district of many square miles of forest, and hither he returns when down with fever or when he has completed the tour of his district. It is during the monsoon that he will be most busy, as then he has to see that his foresters are keeping the logs in the streams after every flood so that they may float out to the main river, as well as putting in freshly-cut logs. The best time of year for the pursuit of tsine is during the monsoon, when it is quite easy to track a herd on striking a fresh trail; at this season the tsine is finding abundance of fodder, and now the young bamboo shoots, the *pièce de résistance* of bovine fare, are springing up. On these the tsine takes heavy toll, with the result that he keeps himself fat and sleek during the cold weather, and even in the hot weather does not show any failing in condition. A somewhat strange trait in the character of the tsine is that he keeps to the same part of the prairie land and will not leave it unless disturbed; this allows the native hunters to know exactly whereabout to look for a herd, and they seldom fail to find fresh tracks in the course of a day's pursuit.

I would recount the procedure of a few days spent in hunting tsine. In one somewhat restricted area in this

valley tsine are more numerous than elsewhere; there must be something in the nature of the ground or jungle growth which attracts them, but to one's own perception the prairie land appears the same for miles. Taking my two elephants, with sufficient of the necessaries of life, such as tinned vegetables, curry powder, oil, etc., to last for about three weeks, I leave my headquarters and proceed down the river to a village, opposite which I shall strike off into the tsine country. The distance to this village is about thirty miles, so that the journey takes me three days, camping nightly at some village *en route*. Arrived at my destination, I make arrangements to get a hunter or "mokso" (as he is known in Burma) who knows the jungles well; there still remain a few "moksos" (to call these individuals hunters would quite rob them of their individuality) from Burmese times, for since the occupation of Upper Burma by the British all guns have been withdrawn from the natives, and thus the extinction of the species "mokso" is almost complete, and there is difficulty in finding any of the old school. Starting at daybreak, the kit is ferried across the river, whilst the elephants swim. A swimming elephant is a curious sight, the animal appearing to float rather than swim, nothing but the highest ridge of the back being visible, whilst occasionally the trunk is protruded to draw in air. But to proceed on our journey. We take a Chin path, which is merely a jungle track used by Chins on their way from and to their hills during the cold season, when they come into the valley to sell ginger-root, plantains, and other produce of their hill country to the Burmans, and return with the produce of the valley, such as dried fish and cotton goods. They frequently purchase, or sometimes steal, buffaloes, which they drive back to their hills, and kill on some feast-day, amid copious libations of liquor distilled from hill rice. Up to the foot of the hills, a distance of about nine miles from the river, the path is exceedingly good, winding in such a manner as to avoid nullahs and broken ground, and yet take the nearest

possible route. We journey over the grassy plain, interspersed with stunted trees, for six miles to the westward; this will bring us to our camping-ground beside a creek rushing from the hills, where our "mokso" has often camped before, in days when he had a muzzle-loader and shot the wily tsine. On our way we are on the *qui vive* for any fresh tracks of tsine which may have crossed the path recently, and also keep sharp eyes to either side, as, not unfrequently, tsine may be viewed, although the habit of the animal is to be cautious when crossing a jungle-path, and to hurry on for some distance after doing so. It must not be supposed that tsine are not cognisant of a path and its purpose; they know very well, and, if on the feed, when reaching a path they will hurry on for some few hundred yards before grazing again. Indeed, in my experience, most wild animals have this habit. Should we come on fresh tracks, we start off to track, intending to reach our camp later on towards nightfall. The tracks are not unlike those of the village cattle, but cut more finely, and, if one might use the expression, more deer-like in appearance. The tracks of a tsine and a bison may be easily distinguished after a little experience, the former being elongated, whereas the latter are almost circular, and, of course, broader. The track of the tsine is, indeed, so nearly approaching that of a sambur, that one sometimes has to look twice before making quite sure. Following up the herd, we shall probably find evidence that they have been cropping the long grass as they go; if, on the contrary, there are no such signs, it would not be worth while tracking them, for, of a certainty, they have been disturbed by getting the wind of somebody or something, and are making a line for another part of the prairie land, which will lead us on for miles, till nightfall. As the herd moves along it breaks up, rejoining again and proceeding in Indian file where a nullah has to be descended by a single break in the bank or broken ground, to be avoided by a strip of

sound going, for the tsine, like the bison, always takes the easiest and most level path, and not the steepest and most difficult, as some men, who have never had experience, are fond of asserting. It may be safely laid down that no tsine or bison can go in any place where a man on foot cannot follow, but there are many places where a man can go and the bovine tribe could not follow. Following on the tracks, we come to a depression in the ground in which there are clumps of bamboo growing; the herd, after spreading about this and feeding on the bamboo shoots, have made their exit on to the prairie again. As the sun is now hot, the probability is that the herd is lying down in some dense bamboo grove similar to that through which we have just come. We shall, therefore, have to proceed steadily on nearing the next bamboo grove, and listen carefully, for the animals, if not resting, may be feeding, in which case we may expect to hear the bamboo breaking. Now we get on to a well-beaten big game path, which is well marked, even without the aid of the fresh hoof prints. These paths often lead for many miles over the prairie, connecting one tsine ground with another, and passing *en route* through groves of bamboo and out on to the open grass land again. One herd of tsine will resent and forcibly oppose the intrusion of another herd on to its own particular division of country, there being apparently a sphere of influence allotted to each herd by the unwritten code of tsine laws. Tsine are very fond of breaking small trees with their horns as they pass along, and of bowling over the ant-hills which the white ants make in the rainy season; this they do presumably with a view to cleaning their horns as well as getting rid of the tics which cling to their heads when they could not otherwise be disturbed. Now we cross a small nullah where the tracks of the herd show freshly, but at what hour exactly they passed it is impossible to say. Going a little further, we find that the herd has stampeded, but this often occurs when they are stung by wasps, which make their nests in the bamboo clumps, and the pursuit should not, therefore, be given up,

as it will probably be found that they have resumed their usual pace a few hundred yards further on. We are now on the open prairie again, all eyes for the expected herd. Ah, what is that about one hundred yards off, half concealed by the trunk of an indine tree? After a little reflection we are satisfied that it is only an ant-hill or an indine leaf, which are both easily mistaken for tsine, the maxim here, as elsewhere, holding good that animals only inhabit places or country which closely resembles the shade of themselves and so act as a self-protection from man. Thus the elephant inhabits the dense shade of thick forests, and it must be seen to be believed how effectually this trait acts as a complete concealment of the presence of the animals. Bison, which are black, inhabit the same sort of country, but tsine which are a bright chestnut, must live on the yellow lands of the plain where the soil and the ant-hills harmonise with the colour of their hides. On we trudge, dipping in and out of nullahs, taking a view under the lowest branches of the forest as we go.

My attention is arrested by some movement; ah! sure enough, the swishing to and fro of tails, which, like any movement in the quiet jungle, immediately rivets the observation. The herd is in front of us. I can see them now, as I write, seven of them following one another in irregular order; to our left and a little ahead is a knoll; here no doubt the herd made its midday siesta, and, as the sun declined, came slowly trooping out to graze; they wander on athwart our track, presenting their bright sides to a side-shot; as they graze along they do not raise their heads but hold them always on the *qui vive* in such a manner as to be able to see under the branches of the forest trees; the breeze or rather the currents of the air (for there is no breeze proper) are apparently unfavourable to us, for one of the herd moves round with head still declined and peers in our direction; the others, without moving, take note of their comrade's attitude in silence. The only chance now of a shot is to fling away the sun-

hat and crawl up as near as possible to the herd, taking cover behind the ant-hills and rough grounds. As I move or rather wriggle along towards them I have a peep to see what they are doing; now the whole herd, having got our wind, are standing with head erect sniffing the tainted breeze directly from us; arrived at an ant-hill I prepare for the shot which can at best be a poor one, for only the chests of the animals are presented at a distance of about 130 yards. In the excitement I make as steady a shot as possible; the herd, however, do not move off at once, but stand gazing, motionless. There is time for another shot; just as I have reloaded my ·450 there is a clatter, followed by the thundering of the herd over the prairie; they are gone, gone for miles ere they will feed again. No blood is apparent in the place where the herd were grazing, nor in the track of the fleeing beasts, so the bullet did not probably take effect.

The sight of a herd of tsine is, indeed, a placid one; as one stops and watches them lazily grazing amid a wealth of luscious grass, showing unmistakable signs of a surfeit of good feeding, the absolute stillness of the jungle impresses itself upon one more than usual, and in the harmonious placidity of the scene almost suggests a picture of the Golden Age. Without doubt the tsine is an exceptionally keen-scented and wideawake animal; and many a long and toilsome tramp has proved in vain through the animals having winded the hunter as he peregrinated here and there trying to puzzle out the tracks of the herd and determine the direction taken. When once the herd has taken alarm, it will travel for days, finding refuge in some prominent ground amid the lowest Chin Hills, from which any enemy approaching can either be winded or seen. A herd which may happen to be in the vicinity of one fired at will, on hearing the shot, likewise make off; and, should it *en route* encounter other herds, will probably cause them also to seek safety in flight, so that it is prudent when after tsine, to fire at nothing but tsine, and even then to make sure as possible

of your mark. Sad experience has taught me that nothing inferior to a ·577 rifle should be used, but I should prefer an 8-bore, for a weapon is required which will knock the animal over wherever hit, bearing in mind that the difficult and annoying chest shot is the most usual one offered in tracking big game. Even when well hit with a bullet from the ·577 (excepting the shot planted behind the shoulder) a tsine may give a lot of trouble by going some miles ere he will yield to another shot. I have been at some pains in making inquiries from the old Burmese and Chin hunters as to the propensity of the tsine to charge when wounded or when fired at in the first instance. The consensus of native opinion will, no doubt, be contested by many shikaris, but *tot homines quot sententiæ*, and no two sportsmen seem to have the same experiences, or perhaps the same occurrences, present themselves differently to the minds of each and every individual. This somewhat unorthodox opinion is that the tsine is a less, nay, much less fearsome animal when wounded than the bison in a similar plight; that the bison is "tai so dai" ("very bad"), to use the Burmese expression, but that the tsine will die quietly, or, at any rate, receive the *coup de grace* with more composure than the bison. I cannot but think that, from the cautious manner in which the natives pursue the bison, and the somewhat listless manner in which they attack the tsines, there must be some foundation for their assertion. Most of the old hunters will relate an adventure in which one of their companions came to a tragic end, either by the animal's horn having been thrust through the thigh of the said companion, or by being taken between the horns of the animal and the life shaken out of him. On asking whether the animal in question was a bison, or a tsine, the answer is invariably "a bison!" As there has been a good deal of diversity in describing the colour of tsine, having seen them at all ages and under various conditions, I may be excused for recording my experiences as, at any rate, they presented themselves to me. Once on coming up the

bank of a nullah on to the prairie, I had the unusual, but fortunate, experience of almost walking on to a solitary bull tsine lying down, evidently asleep. He could not have been fifteen paces from me. I did not, however, observe him until he jumped up and was making off at a gallop; as he did so, he leapt into the air, and lashed out with both his heels, evidently from disgust at having been caught napping at such close quarters; indeed, his demeanour suggested that no liberties would be permitted if we had fired a shot at him. This was the first tsine which I had ever seen, and it was not only a grand sight at such close quarters, but the appearance of the animal was altogether different to that which I had previously figured in my mind. I exclaimed to the "mokso," "Blue! blue!" Now there are various shades of blue; it was not a sky-blue, nor a sea-blue, nor any blue of that kind, but the first impression that arose in my mind was, "a tsine has a blue hide." To analyse this blue we will call it steel-blue; but a shade must be taken out of the blue and put into the steel; it was thus very nearly approaching that of an old and rather washed-out kharki coat, a colour impossible to describe accurately. Some would call it a bluish-grey or a whitey-grey; the Burmese who were accompanying me called it "blue," and those animals met in a herd they designate "red" (their language, however, does not permit of much delicacy in designating colour). A mouldy bluish-grey would, I think, describe the colour as accurately as any other. Only in advanced life or old age is the hide of this colour, that of the young animals being rightly described as a bright chestnut. The skull differs from that of the bison, the forehead being flatter and the bone thicker, whereas the bison's forehead is concave and the bone less dense. The distinction in the horns may be thus illustrated: Holding the arms above the head so that each hand is directly over the temple will represent the shape of the bison's horns; holding the arms above the head, but bringing the hands lower down than in the former case, will roughly represent the tsine. A more accurate

angle will thus be formed at the elbow, which is consonant with the shape of a tsine's horns. The Burmese will lie down on the ground if attacked by a tsine, as the latter cannot thus do damage with his horns, the points of which turn inwards, whereas, if attacked by a bison, the only thing to do is to get behind, or preferably, up a tree. The following measurements, which I have selected from among some hundreds of heads hung up in Chin villages in the plain, may be of interest; the largest measurements which I could find are here given, and may be taken to be, as regards the tsine, if not a record, at any rate dimensions which very few tsine attain.

	Tsine. in.	Bison. in.
Round left horn, at base	20	20
Round right horn, at base	20	20
Between horns, on top of head	6	10
Between horns, across forehead	10½	13½
Round outside curve of left horn	31	30
Round outside curve of right horn	31	29
Between tips of horns	21	29
Length of skull	21	22½
Thickness of skull (about)	1½	2

(Sd.) TSINEGALAT.

GAME LAWS AND RULES OF THE MADRAS PRESIDENCY AND THE NILGIRI HILLS.

MADRAS ACT No. II. OF 1879.

An Act to provide for the protection of Game and Acclimatised Fish in the District of the Nilgiris in the Madras Presidency.

Preamble.

WHEREAS it is expedient to provide for the protection of wild animals and birds used for food and of acclimatised fish, and to prohibit the killing, capturing, and selling game and acclimatised fish in the district known as the Nilgiris, as described in the Schedule hereto appended, under certain conditions. It is hereby enacted as follows:—

Title and local extent.

1. This Act may be called "The Nilgiris Game and Fish Preservation Act, 1879"; and it shall come into operation in the district aforesaid, or such parts thereof, and from such dates as the Governor in Council may from time to time declare by notification in the *Fort St. George Gazette.*

Interpretation-clause —"Game."

2. In this Act the word "game" shall include bison, sambhur, ibex, jungle-sheep, deer of all descriptions, hares, jungle-fowl, pea-fowl, partridge, quail, spur-fowl, *snipe and woodcock*, or such birds or animals as the Governor in Council may deem fit to specify by notification from time to time in the *Fort St. George Gazette.*

3. The Governor in Council may, by notification in the *Fort St. George Gazette*, from time to time, fix a season or seasons of the year during which it shall not be lawful for any person to shoot at, kill, capture, pursue or sell, or attempt to kill, capture or sell game, as may be specified in such notification within the district aforesaid.

Power to fix close season.

Provided that nothing in this Act contained shall preclude proprietors or occupiers of land from adopting such measures on such land as may be necessary for the protection of crops or produce growing thereon.

Proviso as to private lands.

4. Whenever any animal, bird, or fish, useful for food, not indigenous to the district aforesaid, is introduced into it with the approval of the Government with a view to becoming acclimatised or being propagated therein, it shall be lawful for the Governor in Council, from time to time, by notification in the *Fort St. George Gazette*, *to prohibit altogether*, or *to regulate* in such manner and for such period not exceeding three years as may be declared in such notification, the pursuit, killing or capture of such animal, bird, or fish.

Protection of animal, bird, or fish not indigenous.

5. It shall be lawful for the Governor in Council, by notification in the *Fort St. George Gazette*, from time to time to make rules for the regulation and control of fishing in any stream or lake within the said district; and such rules may, with the view to protect acclimatised fish which may be believed to be there, or may be hereafter introduced therein, prohibit or regulate the poisoning of the waters of any stream or lake, the throwing of any deleterious matter therein, the use of fixed engines for the capture of fish in any stream, and the use of nets of a mesh below a certain size to be defined in such rules for the capture of fish in such stream or lake.

Power to prescribe rule for the regulation and control of fishing.

6. Any Government officer or servant or policeman producing his certificate of office, or wearing the prescribed distinctive dress or badge of his department, may require any person whom he finds committing any offence against sections 3, 4 or 5 of this Act to give his name and address, or if there is reason to doubt the accuracy of the name and address so given, to accompany him to the nearest police station.

Power of Government officer or police.

7. Every person convicted before a Magistrate of any offence against sections 3, 4 or 5 of this Act shall be liable for a first offence to a penalty not exceeding rupees fifty and to the forfeiture to Government, at the discretion of the Magistrate, of the game, birds or fishes taken, and of all guns, engines, implements, nets and dogs used in or for the purpose of aiding the commission of such offence, and, in default of payment of fine to simple imprisonment for a period not exceeding one month, and for every second and subsequent offence, to a penalty not exceeding rupees one hundred, and the same liability to forfeiture, and in default of payment, to simple imprisonment for a period not exceeding two months.

Penalties for shooting, etc., during close seasons and for breach of fishing rules.

8. The provisions of the Code of Criminal Procedure relating to the summoning and examination of persons accused and witnesses, and to the levying of penalties shall be applied to proceedings under this Act.

Procedure under this Act.

9. All fees, fines and forfeitures realised under this Act shall be paid into the public treasury.

Appropriation of fees, fines, etc.

But it shall be competent to the convicting Magistrate to award such portion of the fine, or of the proceeds of the forfeiture as he may

Award to informer.

think fit, not exceeding one-half the amount of full fine authorised to be imposed by this Act in any case under this Act, to the person or persons on whose information the conviction is obtained.

SCHEDULE REFERRED TO IN THE PREAMBLE.

The Nilgiri District shall, for the purpose of this Act, be held to be bounded by—

The north bank of the Bhavani River from Attipadi in Attipadi Valley to the junction of the Moyar River.

The west and south banks of the Moyar River from its junction with the Bhavani to the point in the Mudumullah District nearest to Gudalur.

A line carried thence to the head of the Pandy River (Ouchterlony Valley).

The east bank of the Pandy River to where it falls near the Karkur Pass in Malabar Payenghaut.

A line along the south crest of the Ouchterlony Valley and across the western slopes of the Nilgiri and Mukurti Peaks and Sispara Ranges to Wallaghaut.

A line thence along the west crest of the Silent Valley (Malabar) Range.

N.B.—The district shall include the entire tract known as the Silent Valley.

A line from the south end of the above-named range to the Bhavani River at Attipadi in the valley of the same name.

REVENUE DEPARTMENT. NOTIFICATIONS.

Fort St. George, January 10, 1894

No. 40.—In supersession of the notifications quoted in the margin, His Excellency the Governor in Council is pleased, under sections 21 and 26 (*f*) of the Madras Forest Act, to make the following rules for the regulation of fishing anywhere within the following limits:—

At page 1117 of Part I. of the *Fort St. George Gazette*, dated 21st December 1886.
No. 214, dated 30th July 1889.
,, 99 ,, 9th March 1991.
,, 418 ,, 22nd Sept. ,,
,, 487 ,, 27th Oct. ,,
,, 16 ,, 9th Jan. 1892.
,, *405 ,, 1st July 1893.

* Vide note on page 675, *Fort St. George Gazette*, dated 5th June 1894, Part I.

(1) The south bank of the Bhaváni River from Attipádi, in the valley of that name, to its junction with the Moyár River;

(2) from that point the north bank of the Moyár River as far as the boundary of the Nilgiri District, and thence the boundary of the said district as determined for ordinary administrative purposes to Nilgiri Peak;

(3) from that point the western crest of the Nilgiri Hills to its termination below Sispára;

(4) thence along the northern, western and southern crests of the Silent Valley Range to its southernmost point;

(5) from that point to Attipádi;

and of hunting and shooting in all the reserved and rented forests, fuel and fodder reserves, grazing-grounds and areas under special fire-protection within the said limits.

Rules.

1. Unless with the sanction of Government, no person shall shoot at, wound or kill the females or immature

males of any of the following animals within the limits of any reserved or rented forest or of any fuel or fodder reserve, grazing-ground or area under special fire-protection :—

(1) Bison or Gaur.
(2) Sambhur.
(3) Spotted-deer.
(4) Ibex.
(5) Antelope.
(6) Barking-deer.
(7) Four-horned deer.

2. Unless with the sanction of Government, no person shall kill, wound or shoot at any mature male sambhur or spotted-deer if it is hornless or if its horns are in velvet.

3. No person shall kill, wound, shoot at or capture pea-hens at any time throughout the year or the hens of jungle-fowl between the 1st of March and the 1st of October of each year. No person shall take the eggs of pea-hens or of jungle-hens at any time throughout the year.

4. No person shall hunt, kill, wound or shoot at any game as defined in Madras Act II. of 1879, within any of the reserved or rented forests, fuel or fodder reserves, grazing-grounds or areas under special fire protection comprised within the aforesaid limits, until he has obtained a license from the Collector of the Nilgiris.

5. Any person may obtain from the Collector a license to shoot game on payment of a fee of Rs. 30. The Collector may refuse to grant a license only if the applicant has been convicted of an offence against the rules under the Forest Act relating to hunting, shooting and fishing, or against the provisions of Act II. of 1879. The license shall not be transferable and shall be available only for the currency of the fasli year to which it relates, whether it be taken out at the commencement of, or during the currency of the year.

The Collector of the Nilgiris shall, however, have authority, at his discretion, to reduce the payment for each license to Rs. 5 in the case of non-commissioned officers and soldiers of Her Majesty's forces on proof to

his satisfaction that the application for the license is for *bonâ fide* sporting purposes.

6. The seasons during which such licenses shall permit hunting or shooting of game in the reserved or rented forests or other areas specified in rule 4 comprised within those limits, shall be duly notified, from time to time, by the Collector of the Nilgiris and shall be clearly endorsed on the licenses.

7. The Collector may from time to time, by notification in the District Gazette, declare all or any rivers, streams or lakes closed against fishing during any year, or part of a year within any part of the aforesaid scheduled area and may similarly declare the whole or any part of any reserved or rented forest, fuel or fodder reserve, grazing-ground or area under special fire-protection within such scheduled area, closed against shooting or hunting for the whole or any part of any year. He may also prohibit within the same areas and for like periods the pursuit, killing or capture of any particular species of game or fish.

8. The poisoning of water, the dynamiting of fish, the setting of cruives or fixed engines for the capture or destruction of fish, the damming and baling of water for the capture of fish, the netting of fish with nets, the meshes of which are under 1½" square, and the setting of traps and snares for the capture of game are absolutely forbidden anywhere within the limits of the scheduled area in which these rules are in force.

9. Any breach of the above rules within any area reserved under section 16 of Act V. of 1882 will render the offender liable on conviction before a Magistrate, to the punishment provided by section 21 of the Act and any breach of the above rules in any of the above-mentioned areas, other than those reserved under section 16 of the Act, will render the offender liable on conviction before a Magistrate to imprisonment for a term which may extend to one month or to fine which may extend

to Rs. 200 or both. Erratum dated 6th April, 1894, page 414, *Fort St. George Gazette*, Part I., dated 10th April 1894.

The following notifications, issued under Act II. of 1879, which still remain in force, are reproduced below:—

Fort St. George Gazette, 25th November 1884, page 231.

No. 41.—It is hereby notified under section 5 of the Nilgiri Game and Fish Preservation Act, 1879, that, with the view to protect acclimatised fish which may be believed to be in the undermentioned streams and lakes within the Nilgiri District and specified in the Schedule to the said Act or which may be hereafter introduced therein, His Excellency the Governor in Council hereby prohibits the poisoning of the waters of the said streams and lakes and the throwing of dynamite or any other deleterious matter therein, and the use of nets of a mesh below one inch and a half:—

Streams and Lakes.

1. Ootacamund Lake and Stream issuing therefrom.
2. Marlimund Reservoir in Ootacamund.
3. Lawrence Asylum Lake and Stream issuing therefrom.
4. Pykara River and its confluents from their sources down to the limits.
5. Avalanche or Kunda River and its confluents.
6. The Karteri and its confluents.

Fort St. George Gazette, 2nd November 1886, page 980.

No. 42.—The Governor in Council hereby notifies under section 5 of the Nilgiri Game and Fish Preservation Act (II. of 1879, Madras) that from and after this date until further orders, the catching or killing of fish is prohibited in the Bay of the Ootacamund Lake at the foot of Awdry House. The limits within which fishing is prohibited as above will be demarcated by posts erected by the Nilgiri Game Association, one of which shall be placed below St. Thomas' Church and the other below Black Wood Cottage.

Fort St. George Gazette, 28th October 1890, page 825.

No. 43.—Under the provisions of Madras Act II. of 1879 (an Act to provide for the protection of game and acclimatised fish in the district of the Nilgiris in the Madras Presidency), and in supersession of the notification published at page 70, Part I., of the *Fort St. George Gazette* of the 8th February 1881, His Excellency the Governor in Council hereby fixes the undermentioned periods as the seasons during which it shall not be lawful to shoot at, kill, capture, pursue, or sell, or attempt to kill, capture, or sell large and small game, respectively, in the year 1891 and future years, viz.:—

Large game (including all game other than hares and feathered game).	The 1st of June to the 31st of October inclusive.
Small Game (hares and feathered game)	The 15th of March to the 15th of September inclusive.

(Sd.) C. A. Galton,
Secretary to Government.

Extract from Rules under Act II. of 1879, *Nilgiri Game and Fish Preservation.*

3. All Police Officers and Heads of Villages are required to give every possible assistance in the detection of persons violating these provisions, and to give information to the Magistrate, and section 9 of the Act empowers Magistrates to award to any person by whose aid or information a conviction is obtained, half of the fine inflicted on the offender.

THE RULES OF THE NILGIRI GAME AND FISH PRESERVATION ASSOCIATION, AS AMENDED AT THE GENERAL MEETING HELD ON THE 23RD AUGUST, 1893.

1. The name of the Association shall be "The Nilgiri Game and Fish Preservation Association."

2. The objects of the Association are the preservation of the existing indigenous game and the introduction of game birds and animals and fish, either exotic or indigenous to India.

3. Any person taking out a license under the Game Act shall be eligible for membership.

4. Any licensee desirous of becoming a special member of the Association, shall submit a written request to the Honorary Secretary to that effect, and, if elected a member, an entrance fee of Rs. 5 must be remitted to the Honorary Secretary. Such special membership shall cease on the expiry of the license. Any other person shall be eligible for ordinary membership on payment of Rs. 5 and election, but shall have no vote.

5. An Annual General Meeting shall be held on the 15th July each year or such date subsequent thereto as may be fixed by the President, when the Committee shall submit an Annual Report of their proceedings with a statement of accounts.

6. A Special General Meeting shall be held at any time on the application of 10 members of the Association to the Honorary Secretary, provided 14 days' clear notice of such meeting has been given in writing to the Honorary Secretary and that the notice specifies the subject to be discussed at such special meeting.

7. The control of the funds and the entire management of the Association shall be under a Committee comprised of the President and not less than 12 members to be elected at the Annual General Meeting.

8. The Collector, by virtue of his appointment, shall be *ex-officio* President.

9. The Committee shall elect its own Honorary Secretary.

10. The Committee shall meet once a quarter or oftener, if necessary. Four members of the Committee shall form a quorum and the Chairman shall have a casting vote.

11. The accounts of the Association shall be audited yearly by two members of the Committee and the Honorary Secretary.

It shall be competent for the Committee to form Byelaws to be in force till the following Annual General Meeting.

RULES FOR OBSERVANCE BY VISITORS AND RESIDENTS IN THE TERRITORIES OF H. H. THE MAHARAJA OF JAMMU AND KASHMIR.

GOVERNMENT OF INDIA. FOREIGN DEPARTMENT.

NOTIFICATION. No. 85 E.

Fort William, the 13th January 1888.

In supersession of the Notification of the Government of India in the Foreign Department, No. 679 F., dated the 28th April, 1885, the following revised Rules,* for observance by all Europeans, Americans and Australians, who are now, or may be hereafter, in the territory of His Highness the Mahárája of Jammu and Kashmír, which have been drawn up with the consent of His Highness the Mahárája and have received the sanction of the Governor-General in Council, are published for information :—

* Note.—Copies of these Rules can be obtained from the Resident in Kashmir.

I.—(1) Military or Civil Officers of the British Government may, at any time, and without passes, visit and reside in the territories of His Highness the Mahárája of Jammu and Kashmír, subject to such limit † in number as the Government of India, with the concurrence of His Highness the Mahárája, may prescribe, and subject also, in the case of Military Officers, to the military regulations or orders for the time being in force.

† At present there is no limit.

(2) Other Europeans, Americans or Australians, wishing to visit or reside in the said territories, require passes which

may be granted (in the Form A annexed) by the Resident in Kashmír.

II.—Information as to the usual routes for entering and leaving Kashmír may be obtained from the Assistant Resident. The route *viâ* Jammu and Banihal is private, and may not be used except with the special permission of His Highness the Maháraja obtained through the Resident.

III.—Persons subject to these rules are not allowed to travel from Kashmír to Simla (or *vice versâ*) across the hills, or the plains (or *vice versâ*) *viâ* Kishtwár, Bhadarwár, and Chamba, except with special permission of His Highness the Maháraja obtained through the Resident.

IV.—No request should be preferred to the ordinary officials of His Highness the Maháraja, except in real emergencies. An officer of the Durbár is appointed by His Highness the Maháraja to attend to the wants of the European community at Srínagar, and application may be made to him for assistance in petty matters. All payments must be made at the rates demanded, which, if deemed exorbitant, can be reported to the Resident in Kashmír.

V.—Complaints should be preferred, with statements of the circumstances, to the Resident in Kashmír.

VI.—No present may be accepted from His Highness the Maháraja or his officers.

VII.—Persons subject to these rules, who may be desirous of paying their respects to His Highness the Maháraja, can be introduced by the Resident on suitable occasions; and all arrangements for official visits to Jammu or Srínagar should be made through the Resident.

VIII.—The customs and regulations of His Highness the Maháraja's territory should be carefully observed by persons subject to these rules and by their servants.

IX.—When attending evening entertainments given by His Highness the Maháraja, Military Officers should wear,

subject to the military regulations or orders for the time being in force, either uniform or evening dress, and other visitors or residents should wear evening dress.

X.—The Resident may, from time to time, with the concurrence of His Highness the Maháraja, prescribe limits of travel beyond which no one will be allowed to go unless supplied with a special pass obtained from the Resident.

XI.—Rules may, from time to time, be made by the Resident, with the concurrence of His Highness the Maháraja, regarding the routes for entering, leaving and travelling in Kashmír, the rates to be paid for coolies, transport, supplies and other minor matters.

XII.—The Resident in Kashmír is authorised to require any persons subject to these rules, who breaks any of them, to leave the territories of His Highness the Maháraja of Jammu and Kashmír. If any such requisition on the part of the Resident is not at once complied with, the matter will be reported by him for the orders of the Governor-General in Council.

Form A.

Pass No.   of 189 .

of   is permitted to travel or reside in the territories of His Highness the Maháraja of Jammu and Kashmír from the   to the   189 , subject to the conditions noted on the back of this pass.

This pass may be cancelled or withdrawn at any time, and it requires renewal at the end of the period for which it is current.

Endorsement on Reverse of Pass.

I agree to conform to the rules prescribed by the Government of India for observance by Europeans, Americans and Australians in the territories of His

Highness the Maháràja of Jammu and Kashmír. I will return this pass to the Office of the Resident in Kashmír at the end of the period for which it is current.

General Rules.

1. All visitors to Srínagar are requested to communicate their names and dates of arrival to the Durbár official deputed to attend on Europen visitors. The official for the time being is Rái Sáhib Amar Náth.

2. Visitors are advised, in their own interests, to procure such Kashmíri servants as they may require, specially boatmen and *shikárís*, through Rái Sáhib Amar Náth and not through local bankers.

3. Visitors to Srínagar are not permitted to encamp in the Diláwar Khan Bágh situated within the city, nor in the Nishat, Shálimár or Chashmah Sháhi Gardens on the Dal Lake. The fixed camping-places are the Munshi, Hari Singh, Rám Munshi and Chinar Bághs at Srínagar, and the Nasím Bágh on the Dal Lake. Visitors are also informed that the plot of ground at Sumbal, known as the "Nandi Keshwar Bhairava," should not be used for camping purposes.

4. Visitors wishing to visit the Fort or Palace at Srínagar are required to give at least one full day's notice of their intention to the Rái Sáhib deputed to attend on European visitors.

5. Cows and bullocks are, under no circumstances, to be slain in the territories of His Highness the Maháràja, and visitors are requested to take precautions that their dogs do not worry these animals.

6. Visitors about to proceed into the interior and wishing to be supplied with carriage are requested to communicate with the Rái Sáhib at least 30 hours before the time fixed for their departure. Failing this notice the Rái Sáhib cannot be responsible for the supply of carriage in proper time.

7. Travellers in the interior should not encamp within villages. They are advised to encamp only at the ordinary stages and camping-grounds, supplies are not usually available in any other place.

8. Persons going on shooting excursions are required to take carriage and supplies with them. They may not demand them in places where no provision is made for supplying them, and they are forbidden to press into their service the people of the country as beaters for game.

9. Visitors to the Skardu District are informed that the route, *viâ* the Deosai plains, from Skardu to Bandipore, is reserved, and passes to use the same will only be issued to a few visitors by the Kashmír Durbár through the Residency and under the conditions that those, to whom such passes are given, will be prepared to pay double the rates for carriage and coolie transport now in force on that route in cases in which it is necessary to make local arrangements for transport and supplies. Visitors are also informed that when visiting the Skardu District they should make their own arrangements for transport, as the local officials of the Kashmír Durbár will not be bound to meet their requisitions for transport.

9 (*a*). Visitors are also informed that no supplies, except wood and grass, are obtainable, nor should they be requisitioned at the village of Tolti in the Skardu District on the Dras-Skardu route.

10. Visitors are not permitted to shoot in the tract of country extending along the Lake from the Takht-i-Sulimán to the Shálimár Gardens or anywhere in the hills between the Sind and Lidar Rivers, or in the Wangat Valley, or any nullah thereof, all which are preserves of His Highness the Maháràja. Shooting on the tracts marginally noted, which are private property, is also prohibited; and no one should shoot anywhere in

Dopatta Kukiawála, Machipura, Danuchikar, Uri, Banyar and in the territory of the Rája of Kharmong in Baltistán without the permission of the Rája.

Jammu territory without a *parwána* obtained from the Durbár through the Resident.

The attention of sportsmen is invited to notifications issued by the State Council for the preservation of game in Kashmír, published at pages 7 to 9 of this pamphlet.

11. Visitors are prohibited from shooting heron in Kashmír.

12. Fishing is prohibited at the places marginally noted, as also between the 1st and 3rd bridge in Srínagar and in the Jammu Province, unless a *parwána* has been previously obtained from the Durbár through the Resident.

Martund, Verinag, Anantnág, Devi Khirbhowáni.

13. Visitors are not allowed to encamp in the gardens and pavilion at Achhábal, which are the private property of His Highness the Maháraja, nor are their servants allowed to make cooking-places there.

14. When the Dal gate is closed no attempt should be made to remove the barrier or to lift boats over the bund to or from the Lake.

15. Application for houses or for quarters in the Barracks at Srínagar should be made to the State Engineer, Kashmír Durbár, Srínagar.

16. A visitor may not sub-let his house or quarters, and no visitor may rent more than one set of quarters except with special permission.

17. Rent must be paid on demand, or in advance when required, to the State Engineer, Kashmír Durbár.

18. When attending evening entertainments given by His Highness the Maháraja in honour of Her Majesty the Queen-Empress, Military Officers should appear in Mess uniform.

19. Visitors are particularly requested to be careful that their servants do not import into the valley articles for sale, on which duty is leviable. The baggage of visitors

is not examined by the Maháràja's Customs officials, and, in return for this courtesy, it is expected that any evasion of the Customs Regulations will be discountenanced.

Subject to this provision, and with effect from 11th April, 1897, Customs duty according to the tariff in force in the State will be charged on all goods imported by both visitors to, and residents in, Kashmír.

20. Servants of visitors found in the city after dark, and any servant found without a light after the evening gun has fired, will be liable to be apprehended by the Police.

21. Servants of visitors found resorting for purposes of nature to places other than the fixed latrines are liable to punishment.

22. Grass-cutters are prohibited from cutting grass in, or in the neighbourhood of, the gardens occupied by European visitors.

23. All persons are required to settle all accounts before they leave Kashmír, and are responsible that the debts of their servants are similarly discharged.

24. Complaints of the nature of civil suits against subjects of His Highness the Maháràja can only be taken cognizance of by the State Courts, and against all British Indian subjects who are visitors to Kashmír, by the Court of the Assistant Resident on payment of the usual Court fees.

25. Visitors are reminded that the forests in the Jammu and Kashmír State are in charge of the State Forest Department, and that no trees may be felled without permission and payment of the price.

Application for trees and for permission to cut them should be made to the Conservator of Forests, Srínagar, or to the nearest Forester.

26. A dairy has been established, under State supervision, behind Doctor Neve's Hospital. Milk can be obtained there twice a day at the rates in the "Nirakh-

namah," which is posted at the Library, or is obtainable from Rái Sáhib Amar Nath, the Durbár Official deputed to attend on visitors.

Visitors should send their own cans for milk, and they are reminded that the Kashmíri seer is less by about two chittacks than the Indian seer.

27. Visitors to Gulmarg are requested to kindly warn their grass-cutters not to encroach on the cultivated parts of villages.

Grass can always be cut from the Tangmarg.

28. The attention of visitors is called to the special notices printed at pages 25 to 31.

Jammu.

29. Visitors to Jammu are informed that permission to visit the town and to occupy rooms in the State Travellers' Bungalow must be obtained from the Assistant Resident in Kashmír, who will issue passes to approved persons on receipt of application.

This rule does not apply to officers of Her Majesty's service in Civil and Military employment.

30. These rules will be revised and new rules added from time to time as circumstances may require. Any doubt as to the meaning of any rule will be decided by the Resident.

Notification, No. 232, *dated* 21*st April,* 1896.

Game Laws of Jammu and Kashmir State.

The following rules for the preservation of game are published for general information :—

1. Driving game with men and dogs in Kashmír, including Gilgit, Ladakh and Skardu, is prohibited, except in the case of bears, leopards and pigs, driving and beating for which is allowed between 15th May and 15th October, but not at other times of the year. The destruction of all

females of the following animals: Barasingha, Ovis Ammon, Yak, Shahpoo, (Oorial) or Burhel, Markhor, Ibex, Tibetan Antelope, Tibetan Ravine Deer, and Serow, is absolutely prohibited in Kashmír. No Musk Deer, either male or female, are to be shot or taken.

2. The sale in Kashmír of the horns and skins of any of the animals mentioned in Rule 1, excepting the skins of bears and leopards, is prohibited.

3. The breeding season of pheasant, chikor, and partridge extends from 15th March to 15th September, inclusive, in each year.

During the breeding season, as above defined, the shooting of any of the birds above-mentioned, their destruction by nets or in any other fashion, or the taking of their eggs, is absolutely prohibited. During the breeding season no person shall sell in Kashmír any such bird recently killed or taken.

4. During the shooting season, *i.e.*, from the 16th September to 14th March, the netting, trapping and ensnaring of the above-mentioned birds is also prohibited.

5. Whoever intentionally commits a breach of rules 1 and 2 shall be punished on first conviction by a fine not exceeding Rs. 25, or with imprisonment for a term not exceeding one month, or both; and on second conviction, by a fine not exceeding Rs. 100, or with imprisonment not exceeding four months, or both, together with forfeiture of the guns or other weapons and dogs of the offender to the State, and if the offender is a shikári, with forfeiture of licence for one year; provided, that when the offender is a European, or a servant of the European, the case shall be immediately reported to the Resident for disposal in such manner as he may think fit.

6. Subject to the same proviso any person convicted of a breach of rules 3 and 4 shall be punished by a fine not exceeding in each case Rs. 25.

7. His Highness the Mahárája may, by order in writing, relax any or all of the foregoing rules in favour of any person.

AMAR SINGH, RAJA,
Vice-President of the Jammu and Kashmír State Council.

Countersigned—
A. C. TALBOT,
Resident in Kashmír.

GAME LAWS FOR LADAKH, SKARDU AND BALTISTAN.

It has been observed that the coolies and shikárís of Kashmír engaged by European visitors and taken up to Skardu and Ladakh, often use violence to the people and create trouble by non-payment for the supplies and carriage obtained from the villagers. In the hope of preventing complaints arising from this cause, the following rules have been framed and passed by the State Council:—

I.—The local officers shall open a register of all shikárís residing in Ladakh who are known to be competent and willing to accompany visitors in search of game. Many excellent men are to be found among the Ladakhis, and gentlemen desirous of shooting in Ladakh are advised, if possible, to employ Ladakhi shikárís, in place of men from Kashmír.

II.—To facilitate the engagement of Ladakhi shikárís copies of the register referred to in rule I. will be supplied to, and circulated among, visitors in Srínagar by Rái Sáhib Amar Nath, who will be able to give the necessary information as to where, and how, any shikárí selected for employment can be engaged.

III.—Officers who, nevertheless, wish to employ Kashmíri shikárís in Ladakh should, before starting, register, with the Assistant Resident in Kashmír, Srínagar, the name of their shikárí and of his *chota* shikárí, stating also the shikárís' fathers' names, residence and the district, and,

if possible, the *nullah* in which it is proposed to shoot. This information is necessary in order that the names of Kashmíri shikárís, going to Ladakh, may be known and notice taken of misconduct.

IV.—Copies of the register kept by the Assistant Resident in Kashmír under rule III. will be sent to the Assistant Resident for Leh and to the Governor in Kashmír, and, in the event of any misconduct being proved against any shikárí permitted to go to Ladakh, his name will be noted and permission to go to Ladakh in future will be withheld.

V.—In order to prevent inconvenience to officers wishing to travel to Ladakh direct from Baramula, the information required by rule III. may be given to the Assistant Resident by letter, or shikárís who have been actually engaged beforehand, by officers in India, may themselves register their names with the Assistant Resident in Srínagar before joining their employers. It should be clearly understood that any Kashmíri shikárí employed in Ladakh, whose name has not been registered, will be liable to the punishment mentioned in rule IV.

KASHMIR RESIDENCY: *Dated Siálkot, the* 10*th March*, 1895. (Sd.) H. S. BARNES, *Resident in Kashmír.*

PUBLIC WORKS DEPARTMENT.

JAMMU AND KASHMIR STATE.

Rules for Rental of Huts at Gulmarg, sanctioned by the State Council, under Resolution No. 22, *dated 8th October*, 1896.

The huts in Schedule A are available for rental on the following conditions:—

1. No hut will be allotted until the full season's rent has been deposited with the State Engineer, and priority of deposits shall constitute priority of claim to allotment.

2. Such deposit will be refunded in event of failure to occupy, subject to the following deductions :—

A deduction of Rs. 10, if notification of relinquishment is given before 1st April.

A deduction of Rs. 20, if such notice is given after 1st April and before 1st June.

One-half the deposit will be forfeited, if such notice is not given until after 1st June.

3. Tenants may dispose of their right of occupancy for any period of a season for which they shall have paid the full rent in advance, provided that, in each case, the terms of the arrangement shall be clearly defined in a written agreement (signed by both parties thereto), and that a copy thereof shall be filed in the office of the State Engineer for record and for reference of the Resident in case of disputes arising.

4. It is to be clearly understood that the foregoing rule is framed solely for the convenience of tenants who may be unable to occupy their premises after allotment for part or whole of the season ; it is not intended to permit of the acquirement and sub-letting of the huts for purposes of profit which is prohibited.

5. The payment of rent as fixed will entitle the tenant to the use of the premises as detailed in the Schedule, in a state of reasonable and water-tight repair, but the tenant will be liable for all breakages which may occur during his tenancy.

6. Any tenant wishing to add to the accommodation of his holding may do so, with the previous sanction of the State Engineer, at his own cost, and on the understanding that such additions become the absolute property of the State.

7. Any tenant adding to his holding under the foregoing rule shall have the right to occupy the same without enhancement of rent for as many consecutive seasons as he

wishes, provided that he shall pay the full season's rent in advance on demand.

The huts in Schedule B are available for allotment on the following conditions:—

8. No hut will be allotted until the nominal ground-rental of Rs. 20 for the season has been deposited with the State Engineer.

9. Tenants may occupy and add in any way they choose to the existing premises subject to the provisions of rules 3, 4, 6 and 7, but the State will be in no way responsible for repairs or up-keep.

10. Any person wishing to build on a new site may do so free of charge for the first year, provided that the Resident's approval of the site has been first obtained, and also provided that, after the first year, the premises shall become subject to rules 8 and 9.

11. Tenants (Schedule A) asking P. W. D. to make additions or changes, or tenants (Schedule B) asking for repairs to their huts, will be charged 10 per cent. commission on the amount of expenditure.

(Sd.) M. NETHERSOLE, C.E., *State Engineer, Jammu and Kashmír State.*

(Sd.) AMAR SINGH, RAJA, *Vice-President of State Council.*

Schedule A.—Gulmarg Huts for Rental.

Hut No. 1.—A new four-roomed hut, two bath-rooms, one small godown, no pantry, stone nogging walls, shingle roof, one kitchen, four servants' quarters, six stables, plank walls, and plank and shingle roof: rent Rs. 130 per season.

Hut No. 3.—A new eight-roomed hut, four bath-rooms, one store-room and one pantry, stone nogging walls, shingle roof with one kitchen, three stables and three servants' quarters, all shingled: rent Rs. 200 per season.

Hut No. 4.—New, three rooms, two bath-rooms, one pantry, plank wall, shingle roof, kitchen, servants' quarters three, stables three, verandah in front of stables, plank wall and shingle roof: rent Rs. 130 per season.

Hut No. 5.—New, same as hut No. 4: rent Rs. 130 per season.

Hut No. 7.—New, four rooms, three bath-rooms, one pantry, one kitchen, plank walls, shingle roof, six servants' quarters, plank wall, shingle roof, stables five, old pacherbandi wall, mud roof, two old pacherbandi servants' quarters: rent Rs. 130 per season.

Hut No. 8.—Dining-room and drawing-room, mud roof, four large bedrooms, shingle roof, four bath-rooms, pantry and three godowns, six servants' houses, eight stables: rent Rs. 270 per season.

Hut No. 10.—New, three rooms, two bath-rooms, one pantry, nogging walls, shingle roof, with one new hut close by, with one room, one bath-room, plank wall, shingle roof, one new kitchen, four new servants' quarters, weather-boarded walls and shingle roofs, four stables pacherbandi walls and shingle roof: rent Rs. 130 per season.

Hut No. 22A.—New, four rooms, two bath-rooms, no pantry, weather-boarded walls and shingle roof, three servants' houses, shingle roof: rent Rs. 80 per season.

Hut No. 22B.—Old, three rooms, two bath-rooms, pacherbandi walls, mud roof, one new hut close by, three rooms, two bath-rooms, weather-boarded walls, shingle roof; one kitchen with the old hut, four weather-boarded servants' quarters, new shingle roof: rent Rs. 130 per season.

Hut No. 25.—New, four rooms, two bath-rooms, one pantry, nogging wall, shingle roof, one kitchen, new, and four servants' quarters, weather-boarded, shingle roof: rent Rs. 130 per season.

Hut No. 35.—New, four rooms, two bath-rooms, one pantry, nogging walls, shingle roof, four new servants' quarters, shingle roof, one kitchen old, pacherbandi walls, mud roof, weather-boarded, no stables: rent Rs. 130 per season.

Hut No. 36.—New, two rooms, one bath-room, verandah converted into a room, nogging wall, shingle roof, one new kitchen, four servants' quarters, weather-boarded, shingle roof: rent Rs. 70 per season.

Hut No. 24.—New hut, plank walls, shingle roof, three living rooms, two small dressing-rooms, four bath-rooms, pantry and store-rooms, one kitchen, three servants' quarters, three stables, all shingled: rent Rs. 160 per season.

Schedule B.—Old huts for allotment on payment of ground-rent Rs. 20 *per season.*

Hut No. 23.—Old, three rooms, two bath-rooms, one pantry, pacherbandi wall, mud roof, one new kitchen, four new servants' quarters, weather-boarded, one stable.

Hut No. 26.—Old, one room new, with pacherbandi walls, shingle roof, two rooms old, pacherbandi walls, mud roof, two bath-rooms, one pantry, one kitchen, three servants' quarters, pacherbandi walls, plank roof, sheds for stables.

Hut No. 27.—Old, three rooms, two bath-rooms, pacherbandi walls, mud roof, one kitchen, three servants' quarters.

Hut No. 30.—Old, four rooms, three bath-rooms, pacherbandi walls, mud roof, two kitchens, five servants' quarters, two stables.

Hut No. 31.—Old, two rooms, one bath-room, pacherbandi walls, mud roof, one kitchen, three servants' quarters, old pacherbandi wall, mud roof.

Hut No. 34.—Old, three rooms, three bath-rooms, one pantry, pacherbandi wall, mud roof, one new kitchen,

four servants' quarters, weather-boarded, three old stables, and four servants' quarters, pacherbandi walls, mud roof.

Huts Nos. 37 *and* 38.—Old, each with two rooms, one bath-room, mud roof, no servants' quarters, only two kitchens, four old stables, pacherbandi wall, mud roof.

Hut No. 39.—Old, two rooms, one bath-room, one pantry, pacherbandi walls, mud roof, very old, one new kitchen and one new servants' quarter, weather-boarded.

Hut No. 40.—Three old rooms, with one new kitchen, three servants' quarters.

Limits of Travel.

Gurais has been fixed as the limit of travel in the Gilgit direction, and the frontier of His Highness' territories in the Ladákh direction. No visitor will be permitted to cross any frontier of Kashmír territory except when contiguous with British India, without a special permit from the Government of India.

Routes.

The following routes for entering and leaving Kashmír are open to the public :—

1. *Viâ* Ráwalpindi, Murree, Kohála and Báramula.

The stages are as follows :—

	No.	Name of Stage.	Distance in Miles.
	—	Ráwalpindi	—
British territory.	3	Murree	37
	4	Phagwári	14
	5	Kohála	13
Kashmír territory.	6	Dulai	11
	7	Domel	10
	8	Garhi	14
	9	Hattián	9
	10	Chakoti	11½
	11	Uri	13½
	12	Rámpore	13½
	13	Báramula	15½
	14	Srínagar	33
		Total	195

There is a Dâk Bungalow at every stage in Kashmír territory, except Hattián. From Báramula to Srínagar the journey can be performed by boat if desired. The tonga road is, however, now open, and tongas can be procured from Messrs. Dhanjibhoy and Son for the entire journey from Ráwalpindi to Srínagar. A Dâk Bungalow has been opened at Srínagar.

2. *Viâ* Abbottabad, Domel, and Báramula.

No.	Name of Stage.	Distance in Miles.
1	Abbottabad	—
2	Mánsahra	16
3	Ghari Habíbulla	18
4	Domel } See route (1)	113
12	Srínagar } See route (1)	
	Total	147

There is a Dâk Bungalow at Abbottabad, Mánsahra and Ghari Habíbulla. As far as Ghari Habíbulla there is a fair cart road, and between Ghari Habíbulla and Domel a fair pony track.

3. *Viâ* Bhimber, Rájauri and the Pír Panjál Range.

	No.	Name of Stage.	Distance in Miles.
	—	Gujrát	—
Kashmír territory.	3	Bhimber	28½
Kashmír territory.	4	Sarai Siabadad	14
Kashmír territory.	5	Nowshera	12
Kashmír territory.	6	Changas Sarai	14
Kashmír territory.	7	Rajauri (Rámpore)	14
Kashmír territory.	8	Thána Mandi	14
Kashmír territory.	9	Bahrámigulla	10
Kashmír territory.	10	Poshiána	10
Kashmír territory.	11	Aliábad Sarai	11
Kashmír territory.	12	Hírpur	12
Kashmír territory.	13	Shapiyan	8
Kashmír territory.	14	Rámu	12
Kashmír territory.	15	Srínagar	18
		Total	177½

4. *Viâ* Bhimber, Punch, and over the Háji Pír Pass to Uri.

No.	Name of Stage.		Distance in Miles.
1	Bhimber	See route (3)	68
6	Tháni Mandi		
7	Suran		16
8	Punch		14
9	Kahúta		12
10	Aliábad		9
11	Haiderábad		8
12	Uri	See route (1)	14
	Srínagar		65
	Total		206

5. *Viâ* Kotli, Punch, Uri, and Báramula.

No.	Name of Stage.	Distance in Miles.
1	Bhimber	—
2	Shaidábad	15
3	Dharmsal	18
4	Koh-i-ruti	7½
5	Dhuna	7½
6	Kotli	6
7	Sehra	12
8	Punch	10
9	Srínagar	108
	Total	184

In ordinary seasons Route (3) is impracticable till May, and is closed by snow in November. Route (5) is usually open in April, but it is difficult and is not recommended. On Routes (3), (4) and (5) the Rest-houses are not kept up, and the supply of ponies and coolies is very limited, and can in no way be guaranteed. The distances in miles are approximate.

Tariff of Boat Hire in Kashmir.

1. Boats hired by the month—

(*a*) Living Boat (Dunga) with crew consisting of at least four persons, Rs. 20.

(*b*) Kitchen Boat (Dunga) with crew consisting of at least three persons, Rs. 15.

(*c*) Third-class Boats (small Dunga) with crew consisting of at least two persons, Rs. 10.

(*d*) Small boat (Shikara) for boat only, Re. 1. For each member of the crew of the same, Rs. 4 a month in Srínagar.

NOTE.—Women and children over twelve years of age are counted as members of the crew in the cases of (*a*), (*b*) and (*c*).

The boats belonging to classes (*a*), (*b*) and (*c*) are marked with a brand L. B., K. B. and 3rd class, respectively.

2. Wages for extra boatmen employed are annas 4 for each man per diem.

3. In addition to the rates given above, *rasad* at the rate of Re. 1 per head per mensem, can be claimed by every member of the crew when the boats on which they are employed are taken out of Srínagar.

4. Boat-hire by distance—

(*i.*)—For each member of the crew :—

	Boats of class					
	(*a*)			(*b*)		
	Rs.	a.	p.	Rs.	a.	p.
From Báramula to Srínagar	0	10	0	0	8	0
,, Srínagar ,, Báramula	0	8	0	0	6	0
,, ,, ,, Islámabad	0	10	0	0	8	0
,, ,, ,, Avantipore	0	6	0	0	5	0
,, Islámabad ,, Srínagar	0	8	0	0	6	0
,, Avantipore,, Srínagar	0	5	0	0	4	0

(*ii.*)—For the trip, crew to consist of the minimum laid down in para. (1) :—

	Rs.	a.	p.	Rs.	a.	p.
From Srínagar to Ganderbal	1	4	0	1	2	0
,, ,, ,, Awatkala	3	2	0	3	0	0
,, ,, ,, Bandipore	2	0	0	1	12	0

5. When boats are ordered from Srínagar to meet a visitor at any place, half hire of the boat from Srínagar

to that place is payable in addition to the fare due for the journey to the place where the visitor is proceeding.

6. When a boat is not used on the date for which it is ordered, the following rates for each day during which the boat is detained and not used, are payable for detention:—

	Rs.	a.	p.	
Class (*a*) . . .	0	10	0	per diem.
„ (*b*) . . .	0	8	0	„
„ (*c*) . . .	0	6	0	„

7. Visitors requiring boats and extra boatmen at Srínagar must apply to Rái Sáhib Amar Náth, giving 30 hours' notice for the former and 48 for the latter; and when extra boatmen are required at Sopor to cross the Wular Lake on the journey from Báramula to Srínagar, at least 24 hours' notice must be given to the Tahsíldár at Sopor.

8. Extra boatmen can only be supplied at the following places on the river, viz.:—Báramula, Sopor, Hajan, Srínagar and Khanabal (Islámabad). They are not procurable at Sumbal, Shadipur, Pámpur or Avantipore, the inhabitants of which places are not boatmen by profession but zamíndárs. In every case at least 24 hours' notice must be given to the Civil authorities for their supply.

9. Visitors are particularly requested to satisfy themselves that the wages of any extra boatmen supplied to them have been properly paid before they are dismissed.

It is also requested that they will be careful to see that firewood, milk and other supplies along the river are regularly paid for by their servants and boatmen.

Tariff of Hire of Coolies, Ponies, etc.

1. In all localities in the territories of His Highness the Mahárája of Jammu and Kashmír the standard rate shall be paid for the hire of coolies, etc., except where otherwise specially provided.

2. The standard rate in the said territories is as follows :—

	Rs.	a.	p.	
For a coolie carrying the established load of 25 sérs or less . .	0	4	0	per stage.
„ coolie carrying a load in excess of 25 sérs, but not exceeding one maund . . .	0	6	0	„
„ kahár	0	7	0	„
„ riding pony with English pattern saddle and bridle . .	1	0	0	„
„ baggage and servants' pony or mule	0	8	0	„
„ bullocks	0	8	0	„

The load of a baggage pony or mule is 80 sérs; of a *yak* or bullock 60 sérs. Travellers must provide, at their own cost, all ropes required for securing their baggage.

3. The following rates are prescribed for the under-mentioned marches, in supersession of the standard rate :—

The Ladakh Road.

All visitors to Ladákh are required to enter their names, destination and permanent address in the Visitors' List.

The rates for the different marches are as follows :—

	Coolies. annas.	Ponies. annas.
Srínagar to Ganderbal, or *vice versâ* . .	4	8
Ganderbal to Kangan „ . .	4	8
Kangan to Goond „ . .	4	8
Goond to Sonamarg „ . .	4	8
Sonamarg to Baltal „ . .	4	8
Baltal to Matiun „ . .	6	12
Matiun to Dras „ . .	4	8
Dras to Tashgam „ . .	4	8
Tashgam to Kargil „ . .	6	12
Kargil to Shergol „ . .	6	12
Shergol to Kharbu „ . .	6	12
Kharbu to Lamayuru „ . .	4	8
Lamayuru to Nurla „ . .	6	12
Nurla to Saspul „ . .	4	8
Saspul to Nimo „ . .	4	8
Nimo to Phiang or Spitak „ . .	4	8
Phiang or Spitak to Leh „ . .	2	4

The above rates are not applicable when the Passes are closed by snow.

Sportsmen and others wishing to cross the Zojila Pass before the 1st of May will be required to obtain a *parwána* from the Assistant Resident for Leh, who resides at Srínagar, or, in his absence, from the Governor of Kashmír, and who will make the necessary arrangements for transport, etc.

The rates to be paid to coolies between Goond and Dras will be entered on the back of the *parwána* in English and vernacular, and will vary according to the season. The maximum being limited to Rs. 5 per coolie.

Sportsmen will not be allowed to cross the Pass more than two at a time and at fixed intervals according to priority of application at Srínagar.

Supplies and transport are obtainable at all the regular stages above, except Matayun, where nothing can be demanded; travellers halting at stages other than those above must take their chance about supplies and not ask to change transport.

Notices to this effect will be found along the whole line.

At Leh there is a furnished Dâk Bungalow, and all information about the districts beyond Leh is obtainable through the Wazír of Ladak and from the notices in the Bungalow.

II.—The Bhimber Route.

From Bhimber to Uri, 6 annas each coolie and 8 annas each kahár per stage.

From Bhimber to Shapiyan, 6 annas each coolie and 8 annas each kahár per stage.

The rest-houses on this route are not kept up and the supply of coolies is limited, and cannot be guaranteed.

III.—The Jhelum Valley Cart Road.

1. Any traveller may bring his own transport, and is entitled to buy supplies at any Dâk Bungalow at the prescribed rates on this road.

2. The Durbár cannot guarantee the supply of riding ponies, baggage animals, or coolies along any portion of the road opened to wheeled traffic.

BRIEF NOTES ON TRAVELLING IN CASHMERE.

(Condensed from Official Handbook.)

MURREE SECTION.

FROM RAWALPINDI TO MURREE AND VICE VERSÂ.

THE cost of a single journey by mail tonga of the Imperial Carrying Company is eight, that of a return journey twelve, of a family tonga taking three adults and two children thirty, and of an express tonga (three passengers) twenty-four rupees respectively. A bullock train cart costs sixteen rupees, and parcels are conveyed at rates varying from one to four rupees per maund (of eighty-two pounds) or less in the case of lighter parcels.

CASHMERE (KASHMIR) SECTION.

FROM MURREE TO SRINAGAR AND VICE VERSÂ.

The same Company offers tonga carriage for passengers between Murree and Báramula at the following rates :—

Single journey by mail tonga, thirty, special tonga (three passengers) ninety, and family tonga (three adults and two children) one hundred and twenty rupees respectively; and between Murree and Srinagar the cost is, single journey thirty-seven, special tonga one hundred and ten, family tonga (if available) one hundred and forty-five rupees. In all the above quotations, toll, which must be paid by the passengers, is *not* included.

Bullock train carts from Murree to Báramula cost fifty, and from the former to Srinagar sixty rupees each,

luggage not requiring a special cart being carried at fixed rates.

Tongas, except those carrying the mails, may run only by daylight, and each tonga may carry but one maund and a half of luggage, the allowance in the case of a family tonga being reduced to one maund only. The free allowance of luggage for each seat in the mail tonga is twelve seers.

The time occupied respectively in making each of these journeys by tonga is as follows :—

Between Rawalpindi and Murree	...	6 hours.
„ Murree and Báramula, inclusive of two nights' halt ...	...	48 „
„ Báramula and Srínagar ...	...	6 „

Heavy packages for Cashmere should be sent at least ten days in advance, to ensure their reaching destination before the arrival of the travellers.

(An English sovereign may be roughly calculated as equivalent to fifteen rupees, though the value of the latter varies slightly.)

NOTICE. (*Verbatim.*)

The Kashmír Durbár having introduced a Civil Transport Corps to assist in the requirements of travellers between Srínagar and Gulmarg, and Gulmarg and Báramula, the following rules (sanctioned by the Kashmír State Council under Resolution No. 9, dated 2nd June, 1894, and approved of by the Resident in Kashmír), regulating the employment of this transport, are published for information of the public :—

1. The Transport Corps will only work from the 15th April to the 15th October of each year.

2. Transport can only be obtained at Srínagar, Gulmarg and Báramula.

3. Requisitions for transport at Srínagar should be addressed to Rái Sáhib Amar Náth, but at Gulmarg and Báramula to the Transport Agent.

4. Requisitions for transport must be delivered to the Rái Sáhib or the Transport Agents, as the case may be, at least 30 hours before the transport is required.

5. Applications for transport will be booked according to priority of receipt. In the event of all the coolies and ponies at a stage being already engaged for the day, any further requisitions for transport on that day will be returned with an intimation to that effect.

6. Persons must avail themselves of the transport for which they have indented on the day and at the time mentioned in their requisitions, otherwise their requisitions will be considered cancelled, and they will be liable to pay half rates for the transport entered in their requisitions.

7. A voucher in duplicate will invariably be furnished when the transport is supplied. Travellers are requested to sign one voucher as an acknowledgment of the receipt of transport entered therein and return it to the Transport Officer by whom it is presented, the duplicate copy should be kept in case of any cause for complaint arising.

8. The rates for hire of transport under these rules are:—

	Rs.	a.	p.
For each coolie	0	4	0
,, ,, kahár	0	7	0
,, a baggage pony	0	12	0
,, a riding pony with English saddle	1	0	0

These rates are for each full stage or distance less than a full stage.

9. Each coolie will carry a load of 25 sérs and each pony one of two maunds.

These are the maximum weights and must not be exceeded.

10. On arrival at their destination (or at Magam, in the case of a journey between Gulmarg and Srinagar) travellers are requested to dismiss the transport engaged by them with the least practicable delay.

11. The journeys between Srinagar and Gulmarg, and Báramula to Gulmarg, and *vice versâ*, as also from Gul-

marg to Palhalan (in cases when the transport is taken from Gulmarg to that place) will be charged as two full stages. In the case of the former journey, transport must be changed at Magam, in the cases of the two latter journeys, coolies will not be changed on the road.

12. In cases when a halt is made during any journey half rates only will be charged in respect of each day that such halt may last.

13. In all cases baggage will only be carried at the owner's risk. All possible precaution will, however, be taken to guard against damage and loss, and assistance will be given in investigating circumstances under which damage or loss may have occurred.

14. All complaints against the transport staff should be made to Rái Sáhib Amar Náth at Srinagar.

15. Employers of transport are, in no case, to take the law into their own hands by attempting to deal with causes of complaint themselves; contravention of this rule will be brought to the notice of the Resident in Kashmir.

16. Visitors are reminded that, under the published rules, payment for coolie and pony transport must be made in advance to the Transport Agent and not to the coolies or pony men. If payment is not made in advance the Transport Agent has authority to refuse to supply transport.

17. It is requested that the Transport Agent be treated with the consideration due to officials of His Highness the Maháràja of Jammu and Kashmir.

(Sd.) AMAR SINGH, RAJA,
VICE-PRESIDENT,
Jammu and Kashmir State Council.

Approved—

(Sd.) A. C. TALBOT,
Offg. Resident in Kashmir.

GAME RULES OF KASHMIR STATE

Jammu and Kashmir State.

Notification. (*In extenso.*)

The following rules for the preservation of game are published for general information. *They apply to European and native residents and visitors, and also to State subjects and officials:—*

1. Driving game with men and dogs in Kashmir, including Gilgit, Ladakh, Skardu and Kishtwar, is prohibited, except in the case of Bears, Leopards and Pigs, driving and beating for which is allowed between 15th May and 15th October, but not at other times of the year. Between Shupyon and Baramulla on the hills which bound the vale of Kashmir to the south, Black Bears may be driven for from 1st April to 15th October. The destruction of all females of the following animals—Barasingha, Ovis ammon, Yak, Shahpoo (Oorial), or Burhel, Markhor, Ibex, Thibetan Antelope, Thibetan Ravine deer and Serow—is absolutely prohibited in Kashmir. *No Musk deer, either male or female, are to be shot or taken.*

The possession by anyone of a net or nets for the express purpose of taking birds or wild animals is hereby declared to be illegal, except netting for hawks in Kishtwar (Jammu Province), which is permitted as heretofore.

2. The sale in Kashmir of the horns and skins of any of the animals mentioned in rule 1, excepting the skins of Bears and Leopards, is prohibited.

3. The breeding season of Pheasants, Chikor, Partridges and Wild-fowl is considered to extend from 15th March to 15th September, inclusive, in each year.

During the breeding season, as above defined, the shooting of Pheasants, Chikor, Partridges, Geese, Ducks and Teal, their destruction by nets or in any other fashion, or the taking of their eggs, is absolutely prohibited. During the breeding season no person shall sell in Kashmir any such bird recently killed or taken.

4. During the shooting season, *i.e.*, from 16th September to 14th March, the netting, trapping and ensnaring of Chikor and Pheasants is also prohibited. Wild-fowl may be noosed by villagers in their fields, but not in the jhils.

5. His Highness the Maharaja may, by order in writing, relax any or all of the foregoing rules in favour of any person.

6. Sportsmen wishing to shoot in the lands of the Raja of Kharmang must first obtain his permission to do so.

7. The following nullahs are closed until April 15th, 1900:—

I.—The *Bow* above Bandipur. The stream in this nullah rises between Changwai and Ranga, and flows in a south-easterly direction towards Kralpoora, when it is joined by another stream coming from the west.

II.—The *Oor* in the Liddar. This is on the right bank of the Liddar, close to Dowhat.

III.—The *Zais Nai* in the Wardwan. This joins the Kreashnai above Furriabad, and the stream is the western source of the Furriabad River.

IV.—The *Gweo Nai* in the Wardwan. This is the nullah which joins the left bank of the Wardwan River one march above Maru Wardwan.

V.—The *Phoo*, or as it is sometimes called the *Kurtsee Phoo*. It joins the right bank of the Suru River above Kargil.

VI.—The *Achkor* in Baltistan. This joins the right bank of the Indus above Rondu.

VII.—The *Braldah* or *Braldu*. The river of this nullah rises to the east of the Shigar, and is the main source of that river.

VIII.—The *Basgo* in Ladakh. This is above the village of Basgo on the Leh road.

IX.—The ravine above *Saspul* which is adjacent to Basgo.

8. Markhor shooting in the *Kanjinag* and *Shamshibri Mountains* is prohibited until April 15th, 1901.

9. Licenses to shoot large and small game will be granted as follows :—

I.—A license, for which the sum of Rs. 60 will be charged, permits the holder to shoot large game in the districts and nullahs which are open for sport, provided he does not kill more than the following numbers of the animals specified :—

Pir Panjal Markhor	1
Astor variety of Markhor	2
Ibex	6
Ovis Hodgsoni (Ammon)	2
,, Vignei (Sharpu)	4
,, Nahura (Burhel)	4
Thibetan Antelope	4
,, Gazelle	2
Kashmir Stag	2
Serow	1
Bears, Leopards, Pigs, Tehr, and Goral	no limit.

This license to be in force from March 15th to November 15th.

II.—A license of the value of Rs. 20 will cover the period from 15th March to 15th November, and will permit the holder to kill *Black Bears and Leopards only*.

III.—A license of the value of Rs. 20 will be issued to cover the period from November 15th to March 15th. It will permit the holder to kill Tehr, Goral, Serow, Bears, Leopards, and Pigs, and in addition two Kashmir Stags and one Pir Panjal Markhor.

IV.—A small game license, for which Rs. 20 will be charged, will be issued to all who wish to kill wild-fowl, Chikor, Partridges and Pheasants within the season. No restrictions as to number are made, but it may hereafter be found necessary to curtail the shooting season. Snipe and quail shooting is open to all, free of cost.

10. The *Tahsildari of Kishtwar*, including the *Wardwan* and *Duchin Districts*, are under the regulations for the preservation of game.

11. Whoever intentionally commits a breach of rules 1, 2, 7, 8, and 9 (I.), (II.) and (III.), shall be punished, on first conviction, by a fine not exceeding Rs. 25, or with imprisonment for a term not exceeding one month, or both, and on second conviction by a fine not exceeding Rs. 100, or with imprisonment not exceeding four months or both, together with forfeiture of the guns or other weapons and dogs of the offender to the State, and if the offender is a Shikari, with forfeiture of license for one year; provided that when the offender is a European, or the servant of a European, the case shall be immediately reported to the Resident for disposal in such manner as he may think fit.

12. Subject to the same proviso any person convicted of a breach of rules 3, 4 and 9 (IV.) shall be punished by a fine not exceeding in each case Rs. 25.

(Sd.) A. C. TALBOT,
Resident in Kashmir.

(Sd.) AMAR SINGH,
Vice-President of the Jammu and Kashmir State Council.

Applications for licenses should be made to the Assistant Resident in Kashmir. All other communications should be addressed to Colonel A. E. Ward, Honorary Secretary, Kashmir Game Laws, care of Postmaster, Srinagar.

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